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| Isparta Atabey Plain Irrigation Rehabilitation Project Resettlement Action Plan  November 2020 |
| |  |  |  | | --- | --- | --- | | SRM Danışmanlık | 11/18/20 | DSI | |

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# Executive Summary

This Resettlement Action Plan (RAP) is an expanded version of the previously released Resettlement Action Policy Framework (RAPF) document as a result of field studies. This RAP covers the identification of Project Affected People (PAPs), the presentation of a socio-economic baseline for them, the identification of the Project's impacts on the livelihoods of PAPs as well as specific programs and assistance to restore livelihoods. Implementation arrangements including the RAP budget and specific timeline have also been presented. This RAP has been drawn up for the first part in accordance with the contract of the work. The remaining parts will be updated when land acquisition is complete.

As per the contract, the PAPs to be interviewed in the field and the parcels for which information will be gathered (including Treasury lands as well as commonly-used parcels) have been identified on the basis of the draft expropriation plans regarding the 1st part covering 78 km as specified in the terms of reference and prepared by HAPA firm. Accordingly, household socio-economic survey (SES) form and Mukhtar Survey form approved by DSI have been prepared.

During the field study carried out between 14 - 24 June 2020, 22 stakeholders from 20 institutions (12 public institutions, 4 municipalities, 4 NGOs) were interviewed in-depth, and household surveys were conducted with 112 PAPs, 12 of which were female users / owners; as a result information on 251 private parcels was obtained. There were no user PAPs identified who use land that are not private parcels (treasury, DSI, public joint property, etc.). Moreover, the mukhtars of a total of 16 settlements in the area of ​​Atabey Water Users Association (WUA) were interviewed and a mukhtar survey study was conducted. Amongst the 16 impacted settlements, in one of these settlements land will be acquired through consolidation, in 4 of them land is acquired through both expropriation and consolidation, and in 11 of these settlements land is only acquired by expropriation. **The settlements within the scope of RAP are limited to the settlements to be acquired by expropriation** and accordingly, the project impact area is these 15 settlements where land acquisition is conducted by expropriated.

Agriculture and fruit growing are the main sources of income in most of the settlements in the project area. The main livelihood sources of the households are retirement, fruit growing and agriculture, respectively. Fruit growing takes precedence over agriculture in terms of both the number of households engaged in production and average income gained.

The number of people benefiting from irrigation services of Atabey WUA is 5,225 in total and the total number of parcels is 16,490. The average parcel size irrigated is 2.6 decares.

Map 1: Project Impact Area

Map

Description automatically generated

According to the 1st stage expropriation plans, which cover 5 settlements in the Central, Atabey and Eğirdir districts for the prepared 1st stage (78 km), the number of parcels affected by the project is 1,462; of which 1,341 (92%) is private ownership. The distribution of parcels in non-private domain are as follows: 23 parcels belong to the Treasury of finance, 5 parcels to Public Common property, 9 parcels to legal institutions (Isparta Municipality, Special Provincial Administration) and 81 parcels to DSI. 3 parcels are under lawsuit. The lawsuit is between administrative institutions (Finance and Forestry Enterprise) and there are no private individuals impacted. During the field study, no users were identified on these parcels. As the total of private parcels and other parcels, the area affected by the permanent easement is 93,481 m2, the area affected by the temporary easement is 93,166 m2, and the area affected by expropriation is 86,678 m2. The total title deed area of ​​these affected lands is 5,636,642.54 m2. Accordingly, when the areas of the affected lands and the total title deeds are examined, 1.66% is permanent easement, 1.65% is temporary easement and 1.54% is expropriation area. For all lands, the project affected area corresponds to 5% of the total area title deed.

The total area to be expropriated in 1,341 private parcels is 62,423 m², permanent easement is 83,188m², and temporary easement is 86,412 m². Land acquisition impact on private parcels are shown in detail in Table 3.3. According to this;

* In 535 private parcels affected by expropriation, average expropriation area is 117 m2, this corresponds to 2% of average title deed size of the affected parcel (5.313 m2).
* In 1,116 private parcels affected by the permanent easement, the affected area average is 75 m2 and the average title deed size of the affected parcel corresponds to 2% of 3,744 m2.
* In 779 private parcels affected by temporary easement, the affected area average is 111 m2 and the average title deed size of the affected parcel corresponds to 3% of 3,746 m2.
* In 1,176 private parcels affected by both expropriation and permanent easement, the affected area average is 125 m2 and the average title deed size of the affected parcel corresponds to 3% of 3,716 m2.
* Finally, in 1,341 private parcels affected by expropriation, permanent and temporary easement, the affected area average is 174 m2 and the average title deed size of the affected parcel corresponds to 5% of the 3,524 m2.

The number of shareholders in private parcels is 2,604 people, with an average of 2 shareholders per parcel. Moreover, during the second phase of land acquisition, the number of PAPs and the RAP will be updated. In total there will be two phases of land acquisition.

During household surveys, PAPs were posed questions on impact on their land assets. When the ratio of the affected person parcel area to the total land assets is calculated according to survey results, the ratio of the lands affected by expropriation, permanent easement and temporary easement to the total land used is 2%. All of the 16 parcels in Harmanören are impacted by expropriation. These parcels have 15 owners and a survey was conducted with 4 of them during the field study. Information on PAPs land holdings were collected during surveys, and accordingly each owner has remaining land and the land assets affected by expropriation correspond to 3% of the total land holdings. There were **no PAPs** identified during field study, that are affected by permanent land acquisition of 20% or more of the entire land they own.

There are a total of 120 parcels of land within residential zoning are in Kuleönü, including 108 private parcels, 10 parcels belonging to Kuleönü Municipality and 2 parcels belonging to the Kuleönü Village Legal entity. The impacts on these parcels and the measures to be taken will be carried out by DSI Regional Directorate within the scope of the second stage expropriation plan studies. The parcels allocated as residential areas according to the zoning plan constitute almost half of the total parcels (38%). Second phase expropriation plans have not been finalized yet. However, the actions to be taken by the DSI Regional Directorate regarding this issue will be clarified in the future. The project may have a negative impact if the planned and targeted structures in these parcels cannot be established due to the restrictions caused by expropriation and permanent easement rights. For this reason, in order to eliminate the building restrictions that the project may impose, it may be necessary to go through zoning modifications and to realize the planned zoning or change the route in the areas not affected by the project, and if these are not done, it may be necessary to expropriate the entire parcel in order not to adversely affect the PAPs. However, acquiring full parcel may increase expropriation related costs and in addition, an unnecessary expropriation will be triggered. However, it is essential not to pass through zoned areas unless it is mandatory in irrigation projects.

Livestock production is not expected to be impacted by Project’s land acquisition. The ratio of grazing lands (KOM) impacted by the Project to total grazing land size is 2%. Moreover, the total area impacted for the first part (expropriation, permanent and temporary easement) is merely 4,123 m² and it is a very small area to impact livestock production.

During baseline studies, immovable assets have been identified in the affected parcels in Büyükgökçeli and Harmanören. Accordingly, there are no residential buildings impacted by the project. Immovable property (irrigation network in 12 parcels, 1 greenhouse, concrete and iron pole in various lengths and sizes, wire fence) were identified in 35 parcels. Moreover, immovable assets were identified in 2 non-private parcels in Harmanören. These are 1 irrigation network and wire fence. There are no immovable assets identified in non-private parcels in Büyükgökçeli. Within the scope of RAP, compensation payments in the amount of replacement cost will be made to the right holders of the immovables as illustrated in the Entitlement Matrix in Section 5.7.

Draft expropriation plan studies have been completed for Büyükgökçeli and Harmanören settlements. In these draft plans, the number of trees expected to be affected by the Project in private parcels was calculated as 4,105. The tree species that are expected to be most affected are rose, cherry, almond and other tree species. The number of private parcels affected in these two settlements is 1007 (Büyükgökçeli 749, Harmanören 258 parcels) and the average number of affected trees per parcel is 4. The loss of trees is not expected to cause a significant loss of income for the households due to the remaining land assets of the households and the low average number of affected trees per household. However, for the trees affected by the project, the rights owners will be compensated as specified in Section 6.10 within the scope of RAP.

The entire parcel of 15 PAPs in 16 parcels in Harmanören is impacted by permanent expropriation. There are fruit trees in all but one of these parcels. One PAP’s two parcels are impacted. The number of fruit trees identified by HAPA in these parcels is 649, among which plum, almond, vine, quince, pear, apricot and walnut are among the income generating tree species. Decrease in the number of fruit trees of households that make a living by fruit growing may negatively affect the income of these households. For this reason, the income obtained by the households from the trees will also be taken into consideration while making tree valuation in expropriation studies.

There are no landless PAPs identified as a vulnerable group. Amongst the surveyed households, 7 (5%) of 112 households have unemployed individuals. The number of water users in the MoH is 925. The number of households with female household heads of 12 (10%) of 112 surveyed households. In the field study, there are no PAPs impacted by land acquisition (property expropriation + permanent easement + temporary easement) who lose 20% or more of the land they use.

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Although the mitigation measures proposed under the RAP are specified in detail in the entitlement matrix; these measures can be summarized as follows **regarding land and immovable property acquisition:**

* Changing the route when possible, or making a change in the zoning plan, or using expropriation only in case it is unavoidable.
* Payment of a compensation covering the replacement value for lands and immovable property within registered lands
* Compensation payment for crops and tree
* Ensuring that land users who have the right to customary use in non-registered lands obtain a payment corresponding to their customary right and the payment of a compensation covering the replacement value for crops and trees
* Payment of permanent and temporary easement fees for immovable property
* Identification of land users and the payment of crop values to users or official tenants
* Not entering the land prior to payment of compensation values to the bank accounts
* Restoration of land and land exit at the end of the 3-year temporary easement period.

**These measures can be summarized as follows regarding livelihoods and vulnerable groups:**

* Organization of training events on irrigated agriculture, crop pattern, smart agricultural practices etc. by the relevant institutions,
* Organization of information sharing sessions with institutions such as the Ministry of Agriculture and Forestry and West Mediterranean Development Agency (BAKA), on the agriculture and livestock production grant schemes offered by these institutions
* Organization of information sessions targeting vulnerable groups regarding İŞKUR (Turkish Employment Agency) and Social Assistance and Solidarity Foundation (SYDV) supports,
* Organization of various demonstrations for water users,
* Removal of concrete water channels and the opening of these areas to agriculture,
* Creation of passageways for the access of animals to pasture lands during construction activities,
* Compensation for the damages that may be caused by the contractor during construction by the firm .

Grievance Mechanism of the Project will be operated in accordance with the requirements of the World Bank policies. Accordingly, impacted persons or stakeholders will be able to submit their objections and complaints via e-mail/telephone, or through personal complaints via national complaint reporting mechanisms such as CIMER (Presidential Communication Center).

The External Stakeholder Engagement Plan which was drawn up for the project during the negotiation process for land acquisition and whose details are provided in Section 7.5 will also be implemented.

Land acquisition processes will be regularly monitored and followed through **semi-annual** monitoring and follow-up activities. Monitoring activities will be carried out under the supervision of DSI's Project and Construction Department and Real Estate and Expropriation Department and through the active monitoring of the relevant regional directorates. Land acquisition activities carried out by DSI will be monitored, and monitoring activities will be carried out through regular field trips and the reports prepared by the project's field team. If necessary, DSI may choose to hire a consultant for the implementation and monitoring of the RAP.

**Following the completion of the** **RAP implementation**, DSI will assign an independent consultant to evaluate the implementation of the land acquisition activities conducted thereby, and this consultant will be different from the monitoring and follow-up consultant.

# Definitions

***RAP (Resettlement Action Plan)*** refers to the procedures and actions to be put into practice in order to mitigate negative impacts, compensate for losses and offer development benefits for the individuals and communities impacted by a Project. This document has been prepared by taking into account the principles and objectives set out in the OP 4.12 Operational Policy of the World Bank and the Resettlement Action Policy Framework (RAPF), with due regard to the applicable legislation.

***RAPF (Resettlement Action Policy Framework)*** refers to land acquisition principles, structural regulations and design criteria to be applied in the project implementation process.

***Land*** refers to everything such as buildings and crops that grow on a land or are permanently dependent on a land.

***Mitigation measure*** refers to the measures taken to minimize negative impacts on the livelihoods of the impacted people.

***Economic displacement*** refers to the elimination of income or livelihoods due to land acquisition or the restriction of access to resources (land, water, etc.) as a result of the construction, operation and associated facilities and operations of a Project.

***Cut-off date*** refers to a practice aimed at identifying PAPs, impacted lands, crops and immovable properties, conducting a full count for the identification of rights holders and preventing the persons settling, the buildings constructed and the crops cultivated in the project area following the count from making use of the applicable supports.

***Physical displacement*** refers to the movement of PAPs from their houses, workplaces or business areas to another location as a result of the expropriation of their lands in association with the project, and thus the loss of housing and assets.

***Restoration of livelihoods*** refers to any support and assistance intended for improving the livelihoods and living conditions of Project Impacted Persons (PAPs) that are physically or economically displaced or at least restoring them to the level before displacement or the project's implementation phase by considering which of these is better. A transition period will be identified for the support to be offered for the substitution of the livelihood and a reasonable period will be identified in this direction.

***Involuntary resettlement*** refers to any case leading to a social or economic impact as a result of the seizure of lands or assets due to the implementation of the Project through a judicial process and without the consent or preference of their owners and accordingly, resettlement or loss of housing, access to asset or assets or income and livelihoods.

***Vulnerable group*** refers to persons in need who receive aid-in-kind and/or cash assistance from the relevant public institutions, landless persons, the elderly, women, children and the persons who may be affected more negatively by displacement or have more limited capabilities of benefiting from and acquiring resettlement assistance and the relevant development benefits when compared to other persons due to gender, ethnicity, age, physical or mental disability, economic disadvantages or social status.

***Replacement value*** refers to the method of valuation helping with the identification of the amount sufficient to substitute lost assets and compensate for transaction costs. This valuation method prescribes a value that is appropriate for the substitution of an equivalent one for buildings and assets. Efforts are made to provide access to equivalent and culturally acceptable resources and livelihoods for losses that are not easy to appraise or cannot be compensated in monetary terms (e.g. access to public services, customers and suppliers or fishing areas etc.). For agricultural lands, this value refers to an amount that will be enough for the sum of the market price of a land that is close to the affected land, has an equivalent potential of yield or is equipped with equivalent characteristics in terms of use prior to the project or displacement (whichever is higher) as well as the costs intended for restoring the conditions of the said land to those of the affected land and title deed and transfer charges and taxes. For the areas located in urban areas, this value refers to an amount that will be enough for the sum of the market price of a land that is close and similar to the affected land or is equipped with improved public infrastructure facilities and services prior to displacement as well as title deed and transfer charges and taxes. For houses and other buildings, this value refers to an amount that will be enough for the sum of the market price of the materials required for the construction of an affected building with a substitute building that is similar or has a larger area and better characteristics than those of this building or the repair of a building that is partly affected as well as the cost of shipping these building materials to the construction site, workmanship and contracting expenses and title deed and transfer charges and taxes.

***Unauthorized user*** refers to those who cannot have any legal right or demand over the land they occupy as a residence, workplace and/or for other reasons. Although they are not eligible for land compensation, such persons are entitled to claim compensation and temporary livelihood assistance for building, rehabilitation and crop losses.

***Expropriation*** refers to the seizure or limitation of the right of ownership of a property in exchange for a compensation equivalent to the market value of that property.

***Stakeholder*** refers to people, groups, institutions and organizations that are likely to be affected by or affect a project.

***Project*** Turkey Irrigation Modernization Project including all its sub-projects (plans), components and phases.

***Project Affected Person (PAP)*** refers to persons losing their right to wholly or partly own, use or benefit in other ways from an already-constructed building, land (residence, agriculture etc.), annual or perennial crops and trees or any other immovable or movable asset as a result of the implementation of the project.

***Compensation*** refers to payments made by the persons causing the restriction of access to lands, water or other critical land, water or other critical natural resources and sources of income or the voluntary or involuntary damage of any and all personal or common assets of community members or the destruction of these assets to the victims of these incidents over identified and agreed losses.

***Resettlement*** refers to all cases regarding land acquisition and the compensation of the loss of assets, regardless of whether there is actual relocation, land, house or asset loss, economic displacement or the deprivation of other livelihoods and compensation covers all measures taken to mitigate the negative impacts of the Project on PAPs' property and/or livelihood including relocation (if any) and/or livelihoods. Apart from physical relocation, the loss of crops and income is also among the impacts of resettlement.

***Decares*** is the commonly used measurement in Turkey for land size. 1 decare is 1000 m2

# Abbreviations

|  |  |
| --- | --- |
| CIMER | Presidential Communication Center |
| DSI | State Hydraulic Works |
| ESMP | Environmental and Social Management Plan |
| İŞKUR | Turkish Employment Agency |
| KOM | Public Common Entity |
| NGO | Non Governmental Organization |
| OP | Operational Policy |
| PAH | Project Affected Households |
| PAP | Project Affected Persons |
| RAP | Resettlement Action Plan |
| RAPF | Resettlement Action Plan Framework |
| SGK | Social Insurance Institute |
| SYDV | Social Assistance Solidarity Foundation |
| TEYAP | Agricultural Extension and Training Program |
| TIMP | Turkey Irrigation Modernization Project |
| USD | US Dollar |
| WB | The World Bank |
| WUA | Water Users Association |

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# Introduction

This Land Acquisition Plan (RAP) has been drawn up for the land acquisition work to be carried out by the State Hydraulic Works (DSI) intended for Isparta Atabey Irrigation Renovation Project (KEIIP) planned under Turkey Irrigation Modernization Project. A Resettlement Action Policy Framework (RAPF) has already been prepared by DSI and the land acquisition principles, structural arrangements and design criteria to be applied have been identified in RAPF. RAP has identified project impacted persons and communities, developed measures to mitigate the potential negative impacts that may arise out of land acquisition and defines how to compensate for losses.

This RAP has been drawn up in line with the Turkish laws and regulations in particular as well as the principles and objectives set out in the World Bank's OP 4.12 Operational Policy and the RAPF.

## Aims, Objectives and Scope of RAP

KEIIP requires temporary and permanent land acquisition. The project has developed measures to mitigate the negative impacts of land acquisition and prevented physical resettlement. Although land acquisition does not cause physical displacement, the Project is expected to have an impact regarding economic displacement. Aim of the RAP is:

* To prevent and minimize economic displacement associated with land acquisition as much as possible
* To identify the impact of the project on economic displacement
* To analyze the legislative approach to be followed during the acquisition of immovable properties
* To explain the procedures to be followed in the acquisition of lands and other assets
* To summarize institutional arrangements for land acquisition
* To define the socio-economic profile of PAPs through household surveys, in-depth interviews, direct observations and focus group meetings
* To identify the current and potential impacts and opportunities of the project for the restoration of income and livelihoods
* To present the entitlement matrix of the project
* To give information about attitudes towards the project and aid priorities
* To take measures so as to identify vulnerable groups and ensure that they are not adversely affected by land acquisition within the Project;
* To engage Stakeholders in the Project and convey the Stakeholder relations established by the Project for land acquisition;
* To present a detailed implementation program of the Project;
* To design a monitoring and evaluation framework for the purchase of assets and the restoration of income/livelihoods.
* To define grievance procedures
* To define and implement the consultation process subject to land acquisition
* Presenting the RAP budget.

**Scope of works for RAP[[1]](#footnote-1)**

* To examine the reports, data, information and resources to be provided by DSI and that can provide input for the preparation of the RAP,
* Using the expropriation to provide information on the amount, type and ownership status of the lands in need of expropriation, all the impact groups likely to be affected by the project (land owners, legal and unauthorized users of the land, seasonal workers, vulnerable groups, etc.) define and create lists,
* To define the requirements of the Turkish legal legislation that determines the expropriation procedures and methods and the relevant World Bank policies, if any, and to define the differences in implementation and how these differences will be compensated for the project,
* To define the valuation methods for the valuation of immovables subject to land acquisition
* To define the land acquisition process to be followed by DSI
* To determine all kinds of social and economic impacts that may arise from land acquisition through a socioeconomic research that takes into account the gender aspects specific to the project (taking into account the current situation, needs and demands of women benefiting from irrigation services in the project regions and affected by the land acquisition needs of the project), Identify the effects of impacts on the relevant groups (land owners, legal and unauthorized land users, seasonal workers, vulnerable groups, etc.)
* Identifying compensation methods for each identified impact for the relevant impact groups and presenting it through an Entitlement Matrix, defining compensation methods, if any, to be applied for other vulnerable groups, including female water users,
* To identify all relevant parties to take part in the coordination, implementation and monitoring process both within the PME and on the basis of DSI Real Estate and Expropriation Department and local representatives, together with a work schedule and budget for LAP implementation and define their duties
* Conducting meetings with project affected people (PAP) and other relevant stakeholders during the preparation of LAP, ensuring that their opinions, suggestions and requests are included in the scope of LAP, making separate meetings with women water users and other vulnerable groups who are among the stakeholders, Conducting consultations on conditions that consider their needs and conditions,
* To define the works to be carried out by DSI within the scope of public information and consultation activities during the implementation of RAP, in line with the SEP
* To create a monitoring plan for the monitoring and follow-up of the RAP by responsible parties,
* Defining the necessary arrangements for the regular and timely recording of the complaints and requests regarding the land acquisition in the grievance mechanism established within the scope of the TSMP, determining the consultations to be made to inform the public about the Grievance Mechanism,
* Preparing the RAP and performing all other works defined in the RAPF and deemed necessary for this.

**This RAP is an expanded version of the previously released RAPF document as a result of field studies**. The framework document has been enhanced to include a socio-economic baseline for Project Affected Persons (PAP) categories, needs and impacts on livelihoods and specific programs and assistance to restore livelihoods. Implementation arrangements including the RAP budget and specific timeline have also been presented.

## Project Introduction

The primary infrastructure investments to be financed under the Component 1 of Turkey Irrigation Modernization Project (TIMP) include the replacement of the existing open canal systems (canals and distributions structures) with closed and pressurized systems. This component will be implemented by DSI and the component will also include support for the development of operation, maintenance and the strengthening the capacity of water user associations' (WUAs). The project to be carried out within the scope of TIMP is the operation of the irrigation system through the construction works to be carried out within the scope of modernization of the existing Isparta Atabey Plain Irrigation system.

In the Environmental and Social Management Plan (ESMP) prepared by DSI, emphasized the need for renewal of the facility whose economic and physical life is approaching end ; and it is critical to replace the network built with old technology, which causes low irrigation rate (32.5%) and poor irrigation efficiency (37%).

The Isparta Atabey Plain Irrigation is still in operation. Currently, the water is pumped up to 44.50 meters with the Bedre Pump Station with an installed power of 4200 kW, serves the irrigation area with 4 + 231 m tunnel, 104 + 996 m main channel 447 + 985 m backup and tertiary channels (concrete covered open canal and canalette). After the tunnel exit, it is pumped to various heights with 8 pump stations.

With the new Project, the water will be pumped by the Bedre pump station that will built to replace the existing Bedre I and Bedre II Pump stations on the edge of Eğirdir Lake and irrigation water will be taken into the closed pipe system to be built starting from the exit of the Atabey Tunnel. 13,834 ha of gross agricultural area will be irrigated with 6 pump stations and irrigation network. There will be no additional land acquisition for pumping stations.

The Modernization Project is aimed to solve problems related to poor network, high operation and maintenance issues of channels, ongoing water leakage and water loss; and limited access to water caused by water not reaching total irrigation area. Within the scope of construction works, existing open channels will be replaced by drip and sprinkler within a closed system (piped pressure system).

Since the entire irrigation network is designed as a closed (pressurized pipe) system, the land acquisition of the project is not expected to have a physical resettlement impact. Components to take place in the project are as follows;

1. Loading pool: The loading pool will be built at a water level of 955.18 m, and water will be taken to the main pipeline from the pool, hence the agricultural lands of the existing right and left classical channels will be irrigated by this main pipe.
2. Pressure piped network length: 410 km
3. Pump station: 6 pump stations will be established.
4. Irrigation hydrant: 500 single outlet, 1,200 double outlet irrigation hydrants
5. Control, regulation, safety valves: There will be around 5,000 control, regulation or safety valves.
6. Main transmission pipelines:
7. Bedre main transmission pipeline length 6.037 m
8. Main transmission pipeline length 22.759 m
9. Büyükgökçeli main transmission line length 4.417 m
10. Sav main transmission pipeline length 8 + 625 m
11. Sevinçbey main transmission pipeline length is 4 + 718 m
12. Construction site: It will be in the form of a central (main) construction site and mobile or temporary support units as necessary. The envisaged size of the main construction site is approximately 2,600 m2.
13. Service roads: Service roads are 10 m wide standard road section (width). Within the construction; It is anticipated that a total of 4,500 m of road will be constructed, including 1,000 m for access to the construction site, 1,000 m for access to the aggregate pit, 2,500 m for access to the site and workplaces.
14. Quarries: It is anticipated that the concrete aggregate can be obtained from two different places close to the project area.

*Atabey - Medini Stream Material Area Location*: This location is located in the north of the Atabey district, approximately 3.5 km from the district, on the left bank of the Medini stream, around the Karahanimler fountain.

*Sand Pit Equipment Area Location on Isparta-Antalya Road:* It is located to the east of Isparta and at the Isparta Antalya ring road exit, approximately 1 km away, on the edge of Isparta Stream coming from Isparta center.

1. Other facilities and structures: During the construction of the project, excavation storage areas may be needed for the storage of excess material that will come out of the channel excavations.

## Introduction of the Atabey Water Users Association

Isparta Atabey Plain Irrigation Project is operated with the Left Bank Water Users Association (WUA) under the supervision of DSI. It has been accepted that it will be operated by WUA following the implementation of this project.

Atabey Irrigation System was commissioned in 1974 and has been operating as an open system since then. According to the 2019 data provided by DSI, the total number of parcels of the AIS is 16,490. There are 5,225 members of WUA. The number of water users is 925 and 18% of the WUA members are women.

## Project's Area of Influence and the Relevant Land Acquisition

There are 4 districts impacted by irrigation infrastructure renewal works. These are Central, Atabey, Eğirdir and Gönen districts. 3 villages, 1 neighborhood of Atabey; 2 villages of Eğirdir, 1 village of Gonen, 1 neighborhood; 1 town and 7 villages of the center are impacted by land acquisition.

The number of settlements affected by the expropriation and consolidation works of the project is 16. In 1 of these settlements, land will be acquired by consolidation, in 4 of them both expropriation and consolidation, and in 11 of these settlements only by expropriation.

Studies to be carried out within the scope of consolidation are out of the scope of RAP. The settlements within the scope of RAP are limited to the settlements to be acquired by expropriation and accordingly, the project impact area is these 15 settlements that will be expropriated.

The list of impacted settlements is shown below.

Map

Description automatically generated

Figure 1‑1. Position of Settlements Covered by the Project[[2]](#footnote-2)

Table 1‑1. Settlements Affected by Land Acquisition

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | District | Settlement | Type | Expropriation | Expropriation + Land Consolidation | Land Consolidation |
| 1 | Atabey | Bayat | Rural | X |  |  |
| 2 | Atabey | Harmanören | Rural |  | X |  |
| 3 | Atabey | İslamköy | Rural |  | X |  |
| 4 | Atabey | Onaç | Urban |  |  | X |
| 5 | Eğirdir | Beydere | Rural | X |  |  |
| 6 | Eğirdir | Sevinçbey | Rural | X |  |  |
| 7 | Gönen | Cami | Urban | X |  |  |
| 8 | Gönen | Senirce | Rural | X |  |  |
| 9 | Central | Aliköy | Rural | X |  |  |
| 10 | Central | Bozanönü | Rural |  | X |  |
| 11 | Central | Büyükgökçeli | Rural | X |  |  |
| 12 | Central | Büyükhacılar | Rural | X |  |  |
| 13 | Central | Kuleönü | Town |  | X |  |
| 14 | Central | Küçükgökçeli | Rural | X |  |  |
| 15 | Central | Küçükhacılar | Rural | X |  |  |
| 16 | Central | Yazısöğüt | Rural | X |  |  |

Source: DSI, 2020

According to the 1st phase of expropriation plans (78 km) prepared by HAPA, which cover 5 settlements; Harmanören in Atabay District, Beydere and Sevinçbey settlements in Eğridir district, and Büyükgökçeli and Küçükgökçeli settlements in Central districts, the number of parcels affected by the project is 1,462; of which 1,341 (92%) parcels are under private ownership. The area to be expropriated is 86.878 m² (87 decares), the permanent easement is 93.481 m² (93 decares), and the temporary easement is 93.166 m² (93 decares). 3 parcels are disputed and under lawsuit. The lawsuit is between administrative institutions (Finance and Forestry Enterprise) and there are no private individuals impacted. During the field study, no users were identified on these parcels.

Table 1‑2. Breakdown of Ownership

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Breakdown of Ownership | Number of Parcels | % | Number of Shareholders | A. Permanent Easement Area (m²) | B. Temporary Easement Area (m²) | C. Expropriation Area (m²) | Total Affected Area (m²)  (A+B+C) | Total Affected Area % |
| Özel Mülkiyet | 1,341 | 92% | 2,604 | 83,188 | 86,412 | 62,423 | 232,023 | 85% |
| Maliye Hazinesi | 23 | 2% | 0 | 2,999 | 1,059 | 3,838 | 7,895 | 3% |
| Tüzel Kişilik | 9 | 1% | 0 | 914 | 1,754 | 368 | 3,035 | 1% |
| Kamu Orta Malı | 5 | 0% | 0 | 1,329 | 2,480 | 314 | 4,123 | 2% |
| DSI | 81 | 6% | 0 | 4,754 | 1,462 | 19,093 | 25,308 | 9% |
| Davalı | 3 | 0% | 0 | 298 | 0 | 643 | 941 | 0.3% |
| Total | **1,462** | 100% | **2,604** | **93,481** | **93,166** | **86,678** | **273,325** | **100%** |
| Decare | | | | 93 | 93 | 87 | 273 |  |
| % | | | | 34% | 34% | 32% | 100% |  |

Source: HAPA, 2020

When the lands impacted by the project are assessed according to land acquisition type and impact, 11% of the parcels are affected by all land acquisition methods. In this context, 256 shareholders from 142 parcels are affected by expropriation, permanent easement and land acquisition due to temporary easement. The ratio of parcels only affected by expropriation is 7%, and the ratio of shareholders is 8%. The total number of shareholders from the affected individual parcels is 2,604 people. Details are shown below.

Table 1‑3. Breakdown of Privately-Owned Parcels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Breakdown of Privately-Owned Parcels** | **Number of Parcels** | **% of Parcels** | **Number of Shareholders** | **% of Shareholders** |
| **Only Permanent Easement** | 173 | 13% | 274 | 11% |
| **Only Temporary Easement** | 133 | 10% | 218 | 8% |
| **Only Expropriation** | 88 | 7% | 205 | 8% |
| **Permanent Easement + Temporary Easement** | 500 | 37% | 992 | 38% |
| **Permanent Easement + Expropriation** | 301 | 22% | 633 | 24% |
| **Temporary Easement + Expropriation** | 4 | 0% | 26 | 1% |
| **Permanent Easement + Temporary Easement + Expropriation** | 142 | 11% | 256 | 10% |
| **Grand Total** | 1,341 | 100% | 2,604 | 100% |

Source: HAPA, 2020

## Methodology

Desktop study and field study have been utilized while preparing RAP.

**Desktop study**

The PAPs to be interviewed in the field and the parcels for which information will be gathered (including Treasury lands as well as commonly-used parcels and so on) have been identified on the basis of the draft expropriation plans regarding the First Section covering 78 km for 5 settlements as prepared by HAPA firm and a household socio-economic survey (SES) form and Mukhtar Survey form approved by DSI have been prepared.

Table 1‑4. Field Study Settlements

|  |  |  |  |
| --- | --- | --- | --- |
| No | District | Settlement | Type |
| 1 | Atabey | Harmanören | Rural |
| 2 | Eğirdir | Beydere | Rural |
| 3 | Eğirdir | Sevinçbey | Rural |
| 4 | Central | Büyükgökçeli | Rural |
| 5 | Central | Küçükgökçeli | Rural |

Source: HAPA, 2020

Information regarding the affected settlements such as population, crop pattern, agricultural activities, livelihoods, etc. has also been examined during the desktop study.

In order to simplify the tables, the values ​​after the comma are generally rounded where there is no material change in the value.

**Methodology Used for the Identification of the PAPs to be Interviewed**

The PAPs to be interviewed have been chosen out of the lists of owners and users created by HAPA firm in 5 settlements covered by the draft expropriation plans for the First Section.

According to HAPA lists, the expropriation impact has not been accepted as an evaluation criterion by itself since the ratio of ownership expropriation to the total parcel size is 1.32% at most.

The other criterion was for the determination of the users of the non-private lands that are impacted by the project. In the interviews with the mukhtars, the mukhtars revealed that the parcels under public ownership (DSI, Treasury, Public Common Entity) are not used by individual users. The information received was that these lands were either used for commonly or not used at all for animal husbandry activities.

Survey size for each settlement was calculated based on impacted parcel according to only expropriation, expropriation + permanent easement + temporary easement, permanent easement + expropriation criteria. Accordingly, prior to field study information 197 private parcels was targeted. As a result of the survey studies, a total of 112 surveys were conducted and information on 251 private parcels was collected. In this way, information on 19% of the impacted individual parcels was collected and the sample's ability to represent the universe was provided.

Table 1‑5. Number of Surveys and Number of Questionnaires

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| District | Settlement | Private parcel number | Targeted parcel number | Number of HH surveys | Information on Parcel number attained | % on Total parcel obtained |
| Atabey | Harmanören | 258 | 38 | 27 | 48 | 19% |
| Central | Büyükgökçeli | 749 | 109 | 60 | 158 | 21% |
| Eğirdir | Beydere | 215 | 32 | 12 | 29 | 13% |
| Central | Küçükgökçeli | 27 | 4 | 2 | 2 | 7% |
| Eğirdir | Sevinçbey | 92 | 14 | 11 | 14 | 15% |
|  | Total | 1341 | 197 | 112 | 251 | 19% |

The settlements were visited, and interviews were made with the PAPs that were accessible the respective settlements during the visit. Before visiting the settlements, the lists of names were sent to the mukhtars via WhatsApp and they were asked to inform PAPs.

Accordingly, the stages of identifying the PAPs interviewed are shown below.

Şekil 1‑2. Methodology Used for the Identification of PAPs

Figure 1‑2. Methodology Used for the Identification of PAPs

**Field study**

The field study conducted between June 14 and 24, 2020.

During the field study, in-depth interviews were conducted with 22 stakeholders from a total of 20 institutions (12 public institutions, 4 municipality, 4 NGO). The table below shows the in-depth interviews.

Table 1‑6. Stakeholders Interviewed During the Field Study

|  |  |  |  |
| --- | --- | --- | --- |
| No | Type of Stakeholder | Name of the Institution | Title |
| 1 | Public institution | DSI Regional Directorate Real Estate and Expropriation Unit | Director |
| 2 | Public institution | DSI Regional Directorate Project and Construction Unit | Director |
| 3 | Public institution | Atabey Water Users Association | President |
| 4 | Public institution | Atabey Water Users Association | Director |
| 5 | Public institution | Atabey District Governorship | District Governor |
| 6 | Public institution | Egirdir District Governorship | District Governor |
| 7 | Public institution | Gonen District Governorship | District Governor |
| 8 | Municipality | Isparta Municipality | Vice President |
| 9 | Municipality | Atabey Municipality | President |
| 10 | Municipality | Egirdir Municipality | President |
| 11 | Municipality | Gonen Municipality | President |
| 12 | Public institution | Atabey District Directorate of Agriculture and Forestry | Director |
| 13 | Public institution | Eğirdir District Directorate of Agriculture and Forestry | Director |
| 14 | Public institution | Gönen District Directorate of Agriculture and Forestry | Director |
| 15 | Public institution | Atabey SYDV | President |
| 16 | Public institution | Egirdir SYDV | President |
| 17 | Public institution | Gonen SYDV | President |
| 18 | Public institution | Isparta SYDV | President |
| 19 | NGO | Atabey Chamber of Agriculture | President |
| 20 | NGO | Eğirdir Chamber of Agriculture | President |
| 21 | NGO | Gonen Chamber of Agriculture | President |
| 22 | NGO | Isparta Chamber of Agriculture | President |

During the field work, the mukhtars of a total of 16 settlements within Atabey Water Users Association were interviewed and a survey was conducted. Onaç village was not included in the analysis as it was only affected by the consolidation. The settlement list of the mukhtars interviewed is shown in the table below.

Table 1‑7. List of Visited Mukhtars

|  |  |  |
| --- | --- | --- |
| No | Province | Settelement |
| 1 | Atabey | Bayat |
| 2 | Atabey | Harmanören |
| 3 | Atabey | İslamköy |
| 4 | Atabey | Onaç |
| 5 | Eğirdir | Beydere |
| 6 | Eğirdir | Sevinçbey |
| 7 | Gönen | Cami |
| 8 | Gönen | Senirce |
| 9 | Central | Aliköy |
| 10 | Central | Bozanönü |
| 11 | Central | Büyükgökçeli |
| 12 | Central | Büyükhacılar |
| 13 | Central | Kuleönü-Kemal |
| 14 | Central | Küçükgökçeli |
| 15 | Central | Küçükhacılar |
| 16 | Central | Yazısöğüt |

A household survey was conducted with a total of 112 PAPs, 12 of which were female users / owners, and information on the 251 parcels they used and / or owned impacted by the project was obtained. The number of questionnaires in the settlements interviewed are given below.

Table 1‑8. Breakdown of Surveys by Settlements

|  |  |
| --- | --- |
| Settlement | Number of Surveys |
| Harmanören | 27 |
| Büyükgökçeli | 60 |
| Beydere | 12 |
| Küçükgökçeli | 2 |
| Sevinçbey | 11 |
| Total | 112 |

## Constraints

The study is only limited to 5 settlements under the First Section covering 78 km. When the remaining expropriation plans of all affected settlements are completed, the RAP should be updated at the end of 2021, depending on the determination of the assets in the affected lands.

At the first phase, there is no private parcels in residential zoning areas. However, according to existing plans there are residential parcels[[3]](#footnote-3) in Kuleönü Town Municipality impacted by the project in the second phase. The identification of impacts on these parcels and the mitigation measures to minimize impact will be carried out by the DSI Regional Directorate within the scope of the second stage expropriation plan studies. Second phase expropriation plans have not been finalized yet. However, the actions to be taken by the DSI Regional Directorate regarding this issue will be clarified in the future. The impact of these parcels and the measures taken will be explained in detail in the RAP update.

In order for the RAP to be updated, DSI must create the lists of parcel users, differentiate them by gender and identify the status of being affected by the project (those who lost 20% and more than 20% of their total lands, etc.). According to this information, the RAP can be updated.

Apart from the privately-owned parcels whose users could not be identified and/or could not be found out during the study, the users of other impacted parcels will be identified during entry into the respective lands. Users will be identified based on the form created by DSI regarding this issue.

## Land Acquisition Process

It has been decided to consolidate lands in appropriate settlements so as to minimize land acquisition requirements. However, in cases where it is impossible to acquire lands through land consolidation or lands are not technically suitable for land consolidation, the relevant lands are acquired through expropriation. Land acquisition through expropriation is one of the methods DSI uses in various investments, but DSI avoids involuntary physical resettlement as much as possible in the expropriation of public lands or privately-owned lands.

During the modernization of irrigation systems, DSI primarily chose to make use of public lands for the permanent land acquisition needs of the projects. The project design prescribes the monitoring of the existing irrigation system and the use of the existing roads as access roads. Route changes were made where necessary to minimize the acquisition of privately-owned lands for the purposes of reducing the level of affected privately-owned parcels and not causing any resettlement impact.

Lands will be acquired by expropriation during the land acquisition process. The land acquisition process to be followed is shown below.

1. 1,462 project-impacted parcels with different types of parcel and the status of impact were identified in the settlements under the First Section 78 km.
2. Based on these determinations, the Land Market Research Report was drawn up by HAPA firm for the land acquisitions to be conducted for approximately 6,000 parcels.
3. This reports defines the methodology that will be administered in determining the valuation of the lands and parcels to be affected, the valuation of building on these lands and parcels, temporary easement, permanent easement, replacement cost and tree prices and are compatible with international standards.
4. Expropriation plans regarding the remaining portions under the Second Section (nearly 377 km) will be prepared until April 2021.
5. Procedures regarding land acquisition through expropriation will be conducted by DSI.

The methodology to be used in land acquisition:

* Ownership expropriation for facilities such as valves, hydrants, etc.
* Permanent easement restricting the right to use for the places through which the pipeline is passing for 49-99 years (It is forbidden to construct buildings and/or cultivate plants such as trees over this pipeline and the vehicles heavier than 20 tonnes such as construction equipment or trucks are banned from passing over the pipeline.)
* There is also a temporary easement restricting the right to use (1 to 6 years) during the construction phase. This period can be extended if necessary.

RAPF states that the need for additional expropriation is not foreseen since the pumping building and power lines are already available. However, if needed, ownership expropriation will be performed for the pumping building and pole locations and easement will be established for the power transmission line. If additional expropriation is required, implementation will be carried out according to the methodology set out in the RAP.

Power transmission lines can be installed by DSI and transferred to the relevant electricity distribution institution while the relevant institutions can also be assigned for construction provided that the resulting expenses are covered by DSI through a protocol to be concluded between the two institutions.

The table below outlines the rights to be established for the components of the Irrigation Modernization Project.

Table 1‑9. Types of Land acquisition

|  |  |  |
| --- | --- | --- |
| Project Component | Right to be Established | Duration |
| Construction route | Temporary easement | 2-9 years |
| Irrigation pipeline | Permanent easement | 49-99 years |
| Storage area/facility | Ownership | Permanent |
| Pumping station | Ownership | Permanent |
| Access roads | Ownership | Permanent |
| Pool, hydrant areas | Ownership | Permanent |
| Power transmission lines | Ownership for pole locations, easement for transmission lines | Permanent for pole locations  49 years |

Source: RAPF, 2019

As the affected parcel areas prove to be very limited as a result of the expropriation map study for the First Section, it is foreseen that there will not be any case requiring the expropriation of the remaining parcels. However, there may occur new cases where the expropriation of parcels is necessary due to the construction of facilities that require more space. In cases where the remaining parcel area is too small to allow for cultivation, the geometric shape of the remaining parcel is not suitable for agricultural activities and access to the land does not exist anymore and so on, it may be necessary to expropriate the remaining parcel. **While updating the RAP, whether the remaining parcel will be expropriated will be evaluated and, if this is the case, each parcel will be separately evaluated for the expropriation of the remaining parcel.**

In the working routes, the working corridor at the easement facility varies between 4-6 meters. Easement strip widths during the working period **are generally 6 meters**. Detailed information is provided in the legal framework, Valuation and Land Acquisition Process sections.

As for the projects holding "public interest" within the borders of Turkey, land acquisition procedures are "carried out on behalf of the State based on the Expropriation Law No. 2942 (Amended by the Law No. 4650)". All expropriation activities carried out by DSI are performed according to the Expropriation Law No. 2942. The expropriation decision related to the project was adopted on June 13, 2009. In cases where it is necessary to acquire privately-owned lands under a project, DSI primarily opts for purchasing the land through willing buyer - willing seller arrangements as per Article 8 of the Expropriation Law No. 2942.

As for the lands which cannot be purchased through willing buyer - willing seller arrangements or whose rights holders cannot be identified and whose ownership is disputed; a case is filed before the relevant civil court of first instance as per Article 10 of the Expropriation Law for valuation and registration. If the case filed for the valuation of the expropriation fee cannot be concluded within four months, a legal interest is applied to the valued fee following the end of this period. The expropriation fee set by the court as a result of the relevant case is warehouse sited into a bank account for payment to the owner of the expropriated immovable property. Expropriation fees of the immovable properties whose ownership is disputed or is the subject matter of a case are Warehouse sited into a 3-month warehousesit account and paid to their respective owners after they become certain.

Market prices of the immovable properties to be expropriated through willing buyer - willing seller arrangements or by way of resorting to a court are taken into consideration while valuing the land prices by also considering the replacement cost.

Expropriation fees are ascertained by considering all the factors affecting the value of the immovable property as per the criteria specified in Article 11 of the Expropriation Law.

Land acquisition through expropriation will be performed by the Section Directorate of Real Estate and Expropriation of the 4th Regional Directorate of DSI under the coordination of DSI's Department of Real Estate and Expropriation. Ownership of the lands subject to expropriation will be established by the Regional Directorate of DSI through land registry records, satellite photographs and other documents. Immovable properties that will be subject to expropriation will be determined together with the project and construction group over the as-built project. Article 27 (urgent expropriation) of the Expropriation Law will not be used for land acquisition. DSI will not enter into the lands without depositing full compensation to the bank accounts of right holders. For this reason, land acquisition planning will be made depending on the construction schedule so that expropriation procedures can be completed before entering into the lands.

# Socio-Economic Baseline

A survey was conducted to determine the socio-economic status of the project-affected households (PAHs) in the settlements. Results of the information obtained from the desktop study and survey study are given in the following sections.

Since 15 settlements that will be affected by land acquisition through expropriation are located within the borders of related districts, the current state of the district in general is briefly mentioned in each section.

## Demographics

Isparta has 15 settlements located in the project impact area. It is a city with a steadily-increasing population since 2011. Isparta performs better than the Turkey average in certain socioeconomic indicators such as urbanization, literacy rate and the level of employment. Isparta's population density in 2019 was 53.76, which is well below the Turkey average of 108.05. Women and men constitute 50.3% and 49.7% of the population respectively. The average household size in the province is 2.9, which is below the Turkey average (3.4)[[4]](#footnote-4). According to the population data for 2019, 69% of the province's population is aged between 15 and 64. The annual population growth rate is 7.9‰.

As generally evidenced in Turkey as a result of increasing urbanization, the Central district has the largest population among the 13 districts of Isparta. Considering the population change of the project districts in the last 5 years, only the population of the Central district has increased regularly. Atabey and Gönen, two districts in the impact area of the project, are among the 5 smallest districts of Isparta in terms of population.

Figure 2‑1. Population of Impacted Provinces by Years\*

The Environmental and Social Management Plan (ESMP) prepared by DSI (State Hydraulic Works) states that the main reason for the rapid population loss in the region, which has an agriculture-based economy, is the inadequate service of the existing irrigation system. The same plan reports that, considering the average age, the population in Atabey, Eğirdir and Gönen is aging, with a population increase in summer and a decrease in winter.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Atabey | Eğirdir | Gönen |
| Central | 24 km | 36 km | 25 km |



Figure 2‑2. Satellite View of the Project Area

The districts, towns and villages in the project area are located either in or close to Isparta provincial center. In this regard, urban characteristics of these settlements come to the forefront (their urban infrastructure is well-established) when compared to rural characteristics although their population is dense and people engage in agriculture. The information provided in the table below indicates that the total population of 15 settlements affected by the Project constitutes approximately 3% of the population of Isparta.

Table 2‑1. Distribution of Population in the Project Area by Neighborhoods and Settlement Characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | District | Settlement | Settlement Characteristics | Population in 2019 |
| 1 | Central | Kuleönü | Town | 2,669 |
| 2 | Eğirdir | Beydere | Rural | 213 |
| 3 | Gönen | Cami | Urban | 460 |
| 4 | Atabey | Bayat | Rural | 80 |
| 5 | Atabey | Harmanören | Rural | 313 |
| 6 | Atabey | İslamköy | Rural | 897 |
| 7 | Eğirdir | Sevinçbey | Rural | 220 |
| 8 | Gönen | Senirce | Rural | 501 |
| 9 | Central | Aliköy | Rural | 1,340 |
| 10 | Central | Bozanönü | Rural | 547 |
| 11 | Central | Büyükgökçeli | Rural | 1,366 |
| 12 | Central | Büyükhacılar | Rural | 1,118 |
| 13 | Central | Küçükgökçeli | Rural | 220 |
| 14 | Central | Küçükhacılar | Rural | 1,021 |
| 15 | Central | Yazısöğüt | Rural | 470 |
| Total | | | | 11,435 |

Source: TURKSTAT, 2019

The information from the mukhtar (village headman) surveys point out that the population of the settlements affected by the project does not generally change in summer and winter. However, in some settlements, summer and winter populations differ significantly. As can be seen in the figure below, the settlement with the greatest difference is İslamköy (Atabey). It is followed by Küçükhacılar, Aliköy and Bozanönü, which are settlements of the Central district.

Figure 2‑3. Summer and Winter Populations of the Settlements

According to the surveys conducted with mukhtars in the project-impacted settlements, the number of voters registered in the settlements for the last local election is provided in the table below. Accordingly, the largest number of voters belongs to Kuleönü, Büyükgökçeli and Aliköy settlements of the Central district.

Table 2‑2. Number of Registered Voters in the Settlements

|  |  |
| --- | --- |
| Settlement | Registered Voters |
| Aliköy | 960 |
| Bayat | 75 |
| Beydere | 180 |
| Bozanönü | 410 |
| Büyükgökçeli | 1100 |
| Büyükhacılar | 786 |
| Cami | 440 |
| Harmanören | 290 |
| İslamköy | 755 |
| Kuleönü | 1980 |
| Küçükgökçeli | 200 |
| Küçükhacılar | 715 |
| Senirce | 358 |
| Sevinçbey | 165 |
| Yazısöğüt | 360 |

Source: Mukhtar Surveys, 2020

The information from mukhtars indicates that people emigrate from 7 of the 15 settlements[[5]](#footnote-5). 6 of these mukhtars pointed out to unemployment as the main reason for such emigration, while 1 of them highlighted education as the reason. The destination for emigration is usually the district centers or Isparta provincial center. It is reported that retirement is generally the main reason for remigration into villages. Such information obtained from mukhtars is in line with the information in the household surveys, which are available in the following sections. As can be seen in household surveys, the number of retired household heads and the retirement income as a source of income stand out in the impacted settlements.

According to the household surveys conducted in the settlements, 76% of the households live in these settlements permanently. The majority of seasonal residents (16 out of 24 households) live in Isparta.

Table 2‑3. Residence Status of Households

|  |  |  |
| --- | --- | --- |
| Residency Status of Households in the Settlements | Number of Households | % |
| Permanent | 85 | 75.9 |
| Seasonal | 24 | 21.4 |
| Rarely | 3 | 2.7 |
| Not Residing | **112** | **100** |

Source: Socio-Economic Household Survey, 2020

The demographic information of household members according to the socioeconomic household survey results is provided in the table below. Accordingly,

* Household size is 3.3, which is above the average for Isparta and close to Turkey average.
* The majority of households are nuclear families.
* The population in households is mostly between the ages of 41 and 64, while those under 18 has the smallest population among all age groups.
* 93% of household heads are married.
* Education wise, approximately 50% of them are primary school graduates.
* 43% are retired and 41% are farmers (Most retired persons are also farmers).
* 68% of household heads are covered by SGK.

Table 2‑4. Demographic Information of Household Members

|  |  |  |
| --- | --- | --- |
| Demographic Indicators | Number of Household Members | % |
| Gender | | |
| Male | 185 | 51 |
| Female | 182 | 49 |
| *Total* | **367** | **100** |
| Age | | |
| 18 and below | 60 | 16.3 |
| 19-25 | 89 | 24.3 |
| 26-35 | 129 | 35.1 |
| 36-45 | 89 | 24.3 |
| 46-55 | **367** | **100** |
| Marital Status | | |
| Married | 104 | 92.9 |
| Single | 2 | 1.8 |
| Widow/er | 6 | 5.4 |
| Divorced | - | - |
| Not Applicable | **-** | **-** |
| *Total* | **112** | **100** |
| Education\* | | |
| Literate, not finished school | 1 | 0.9 |
| Primary School graduate | 55 | 49.1 |
| Middle School graduate | 25 | 22.3 |
| High School graduate | 20 | 17.9 |
| University graduate | 11 | 9.8 |
| *Total* | **112** | **100** |
| Employment Status \* | | |
| Farmer | 68 | 41 |
| Self-employed | 5 | 3 |
| Civil Servant | 12 | 7.2 |
| Housewife/House-daughter | 2 | 1.2 |
| Pensioner | 72 | 43.4 |
| Unemployed | 7 | 4.2 |
| *Total\** | **166** | **100** |
| Student Status | | |
| Primary School Student | 18 | 30 |
| Middle School graduate | 10 | 16.7 |
| High School | 14 | 23.3 |
| University | 18 | 30 |
| *Total* | **60** | **100** |
| Social Security Status\*\* | | |
| SSI | 76 | 67.6 |
| General Health Insurance | 1 | 0.9 |
| Bağkur | 25 | 22.5 |
| None | 3 | 2.7 |
| Other | 7 | 6.3 |
| *Total* | **112** | **100** |
| Disability Status | | |
| Yes | 7 | 6.4 |
| No | 105 | 93.4 |
| *Total* | **112** | **100** |

Source: Socio-Economic Household Survey, 2020

\*Since some of the household heads interviewed are both retired and farmers, their multiple answers were added up. The total number of household heads from whom information is obtained is 112.

\*\* Data for this indicator covers only the head of the household. No information could be obtained about the household members.

In parallel with the situation across Turkey, the majority of household heads are men in the households within the project area. One-to-one interviews and surveys carried out in the field reveal that male PAPs have more to say regarding both the agricultural activities of households and the Project as most of the landowners and the heads of households under the project are men.

Table 2‑5. Breakdown of Gender for Household Heads

|  |  |  |
| --- | --- | --- |
| Breakdown of Gender for Household Heads | Number | % |
| Male | 100 | 89.3 |
| Female | 12 | 10.7 |
| Total | **112** | **100** |

Source: Socio-Economic Household Survey, 2020

## Education, Health, Infrastructure

According to mukhtar surveys, most of the settlements have primary schools. A small number of settlements have secondary schools, while there is no high school in any of the settlements. The total number of children benefiting from mobile education is 530.

Table 2‑6. Educational Institutions in Settlements

|  |  |  |  |
| --- | --- | --- | --- |
|  | Is there a primary school in the village? | Is there a secondary school? | Is there a high school? |
| Yes | 9 | 6 | 0 |
| No | 6 | 9 | 15 |

Source: Mukhtar Surveys, 2020

* 7 of the settlements have health posts. PAPs living in 8 settlements where there is no health posts receive healthcare services primarily from the healthcare professionals visiting on certain days of the week and, if necessary, from the health institutions in Atabey District Center and Isparta Provincial Center.

The surveyed mukhtars reported that the most common health problems in the settlements were diabetes, aging-related problems and cancer respectively.

* Opinions of the mukhtars regarding the infrastructure were sought. The table below indicates that water, electricity, road and telecommunication infrastructure is sufficient in most of the 15 settlements.

Table 2‑7. Infrastructure Status in Settlements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Is there a drinking water reservoir in the settlement? | Is drinking water sufficient and of good quality? | Is the electricity service uninterrupted? | Is there a good mobile signal? | Is the road infrastructure good? |
| Yes | 12 | 12 | 12 | 11 | 11 |
| No | 3 | 3 | 3 | 4 | 4 |

Source: Mukhtar Surveys, 2020

* The road of only one of the settlements (Harmanören) is asphalt, and the others are surface treated.
* In 13 of the settlements, cadastral and land registry processes have been completed.
* Land consolidation has taken place in 6 settlements so far. The mukhtars of all of these settlements stated that they and the PAPs were in favor of the consolidation.
* 9 of the settlements have grocery stores, 10 of them have coffee houses, and 2 of them have restaurants.
* There are historical sites in 7 settlements, 6 of which are registered and 1 is unregistered.

## Sources of Income and Expenses

According to the Environmental and Social Management Plan (ESMP) prepared by DSI in October 2018, the main livelihoods in these 15 settlements is **agricultural activities**. Major agricultural products providing economic income are barley, wheat and oats. In addition, fruit growing is among the primary agricultural activities in the region. Livestock was reported to be a secondary source of income.

**Greenhouse cultivation** is available in some households with sufficient irrigation. It is held that some households have switched from fruit and vegetable growing to animal husbandry due to insufficient irrigation and high costs. It is been observed that the proportion of women in the workforce has increased in parallel with the increase in animal husbandry. This is considered to be due to the greater role of women in feeding and animal care.

Data from Isparta-based West Mediterranean Development Agency (BAKA)[[6]](#footnote-6) and Isparta Provincial Directorate of Industry and Trade indicates that;

* Industrial facilities in Isparta are mainly concentrated in food, furniture, metal processing and mining sectors in terms of the number of enterprises. Mining, food, textile and forestry products are the sectors providing the highest employment opportunities.

Figure 2‑4. Breakdown of Industrial Facilities by Sectors

Figure 2‑5. Breakdown of Employment by Sectors

* The food industry is developing at an increasing rate. Existing flour factories process the wheat they procure from Isparta and its surroundings, and meet the flour needs of Isparta and surrounding provinces.
* Cold air facilities with a capacity of approximately 320,000 tons operate throughout the province in order to preserve approximately 500,000 tons of apples grown in Isparta and forward them for exports. There are fruit juice and concentrate factories based on apple production.
* Ovine and cattle breeding as well as aquaculture are the main animal husbandry activities in Isparta. Beekeeping is also key for Isparta.
* As a reflection of traditional production in Isparta, the production of textiles, carpets, rose and rose oil in addition to the leather industry has developed, and cement, chipboard, barite, marble and timber have recently been added as industrial production items, thereby improving production diversity.
* 2019 export data shows that Isparta's main export items are mining products, fresh fruits and vegetables, chemicals and chemical products (rose oil, rose concentrate, rose absolute, lavender and other medicinal and aromatic plant products) as well as ready-made clothing.[[7]](#footnote-7)
* There are foreign capital investments in the province of Isparta. Various business ventures have been established in the form of foreign capital partnerships, particularly in the food and cosmetics industry.
* Zander, a fish species fished in Lake Eğirdir, and the fish and crayfish from the region are processed in the facilities at the provincial center and Eğirdir district. All such fish are exported. In terms of fruit production, apples, cherries and apricots are produced. Based on apple production, progress has been made in fruit juice and concentrate production in the province.
* The fact that 40% of the area of Isparta is forestland has rendered the timber and wood products sector important.
* Isparta has 2 Organized Industrial Zones (OIZ), one of which is a Leather-Specialized Industrial Zone, and employs a total of 2,880 people in these OIZs[[8]](#footnote-8).
* The leading sectors promoted by the Ministry of Industry and Technology as an investment area in Isparta and its surroundings are greenhouse cultivation, fruit processing facilities, dairy farming and livestock breeding, furniture and forestry products, and processing of cosmetics and medicinal aromatic plants.

Detailed information on the income and expenses of the project-impacted households is provided in the table below. Accordingly,

* Average annual income of households is higher than their average annual expenditure.
* The borrowing ratio of households is 14.3%.
* The number of households engaged in fruit growing is higher than the number of households engaged in agriculture, and average fruit growing income is higher than average agricultural income.
* Income from ovine breeding is higher than the income from cattle breeding.

The proportion of households that consider their livelihood to be "difficult" is approximately 38%.

Table 2‑8. Household Incomes and Expenses

| Indicator | Unit | Number of responding households | Value |
| --- | --- | --- | --- |
| *Income-Expense* | | | |
| Annual household income (TRY) | Average | 112 | 110,797 |
| Median | 54,000 |
| Minimum | 7,000 |
| Maximum | 1,364,000 |
| Annual household expense (TRY) | Average | 112 | 69,620 |
| Median | 29,950 |
| Minimum | 1,600 |
| Maximum | 941,500 |
| Debt ratio | % 14.3 |  |  |
| *Economic Activity* | | | |
| Households (hh) engaging in agriculture | % 39.3 |  |  |
| Households (hh) engaging in fruit growing | % 53.6 |  |  |
| Number of bovine animals (Milk) | Average (n) |  | 8.81 |
| Number of bovine animals (Stock) | Average (n) |  | 12.08 |
| Number of ovine animals | Average (n) |  | 37.50 |
| Plant production income (TRY) | Average | 44 | 65,230 |
| Minimum | 350 |
| Maximum | 1,187,000 |
| Fruit growing income (TRY) | Average | 60 | 73,417 |
| Minimum | 2,000 |
| Maximum | 125,500 |
| Plant production and fruit growing incomes (TRY) | Average | 86 | 83,758 |
| Minimum | 1,000 |
| Maksimum | 1,255,000 |
| Bovine production income (TRY) | Average | 14 | 71,280 |
| Median | 52,700 |
| Minimum | 3,240 |
| Maximum | 200,000 |
| Ovine production income (TRY) | Average | 2 | 85,000 |
| Median | 85,000 |
| Minimum | 70,000 |
| Maximum | 100,000 |
| Livestock production income (TRY) | Average | 16 | 72,995 |
| Median | 64,700 |
| Minimum | 3,240 |
| Maximum | 200,000 |
| Livestock production expenses (TRY) | Average | 29 | 35,548 |
| Median | 20,000 |
| Minimum | 1,140 |
| Maximum | 180,000 |
| *Living Standard* | | | |
| Households considering their living as difficult | % 37.5 |  |  |
| Households considering their living as good | % 18.8 |  |  |
| Those considering their economic situation as worse when compared to 1 years ago | % 66.1 |  |  |
| Those considering their economic situation as better when compared to 1 years ago | % 10.7 |  |  |
| Those considering their economic situation as the same when compared to 1 years ago | % 20.5 |  |  |

Source: Socio-Economic Household Survey, 2020

### Sources of Income

According to the table below prepared according to the interviews with mukhtars, agriculture and fruit growing are the main sources of income in most of the settlements.

Table 2‑9. Prioritization of Sources of Income for the Settlements

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Agriculture / Fruit Growing | Bovine Livestock | Ovine Livestock | Pension | Working as a Tradesman | Working as a Worker |
| Bayat | **X** | **X** |  |  |  |  |
| Beydere | **X** |  |  |  |  |  |
| Büyükgökçeli | **X** |  |  |  |  |  |
| Cami | **X** |  |  |  |  |  |
| Harmanören | **X** |  |  |  |  |  |
| İslamköy | **X** |  |  | **X** | **X** |  |
| Küçükgökçeli | **X** |  |  |  |  |  |
| Senirce | **X** |  |  |  |  |  |
| Sevinçbey | **X** |  |  |  |  |  |
| Aliköy |  | **X** |  |  |  |  |
| Bozanönü |  | **X** |  |  |  |  |
| Büyükhacılar |  |  | **X** |  |  |  |
| Yazısöğüt |  |  |  |  |  | **X** |
| Küçükhacılar |  |  |  |  | **X** |  |
| Kuleönü |  |  |  | **X** |  |  |

Source: Mukhtar Surveys, 2020

According to the information obtained from the PAPs interviewed, main livelihoods of the households in the project area[[9]](#footnote-9) are retirement pensions, fruit growing and agriculture respectively. The chart below shows the distribution of household income sources. Accordingly, approximately 72% of the households earn income from retirement pensions, 55% from fruit growing, 40% from agriculture and approximately 13% from cattle breeding.

Figure 2‑6. Distribution of Income Sources of Households

Given the following table which contains detailed information about the sources of income, it is observed that the highest average income is obtained from trade and ovine breeding, while the lowest average income is obtained from seasonal labor and rent. **Another conclusion to be drawn from the table is that fruit growing comes before agriculture in terms of both household numbers and average income**.

Many households have more than one source of income in the project-impacted settlements. The number of income sources per household is 2.1.

Table 2‑10.Information on the Income of Households

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source of Income | Number of Households | Average Income (TRY) | Min. Income | Max. Income | Median Income |
| Agriculture | 44 | 65,230 | 350 | 118,700 | 8,750 |
| Orcharding | 60 | 73,417 | 2,000 | 1,255,000 | 25,000 |
| Bovine Breeding | 14 | 71,280 | 3,240 | 200,000 | 52,700 |
| Ovine Breeding | 2 | 85,000 | 70,000 | 100,000 | 85,000 |
| Retirement | 78 | 35,592 | 2,500 | 300,000 | 26,300 |
| Craftsmanship | 3 | 103,333 | 24,000 | 250,000 | 36,000 |
| Worker | 12 | 39,538 | 4,000 | 72,000 | 36,000 |
| Rent Earn | 9 | 14,173 | 400 | 65,000 | 8,000 |
| Officialdom | 4 | 66,000 | 54,000 | 84,000 | 63,000 |
| Seasonal Worker | 3 | 13,533 | 6,000 | 28,000 | 6,600 |
| Disability Pension | 1 | 17,640 | 17,640 | 17,640 | 17,640 |
| Total | 112 |  |  |  |  |

Source: Socio-Economic Household Survey, 2020

When the primary sources of income for the households are examined by top sources of income as specified in the table below, it is seen that 22 out of 56 households with income from fruit growing specify fruit growing as their primary source of income. Of the 28 households that earn agricultural income, the number of those considering agriculture to be a secondary source of income is higher. However, this activity is the primary source of income for the vast majority of households that earn income from cattle breeding. Another remarkable point in the table is that retirement pension income is the primary source of income for as much as 42% of total households. This is followed by fruit growing with about 20%. Details are provided in the table below.

Table 2‑11. Prioritization of Sources of Income for Households

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Total number of households | Number of households with a primary source of income | % | Number of households with a secondary source of income | % |
| Agriculture | 28 | 12 | 10.7 | 16 | 14,3 |
| Fruit Growing | 56 | 22 | 19,6 | 34 | 30.4 |
| Bovine Livestock | 11 | 8 | 7,1 | 3 | 2.7 |
| Pension | 68 | 47 | 42 | 21 | 18.8 |
| Working as a worker | 10 | 9 | 8 | 1 | 0.9 |
| Working as a Tradesman | 2 | 2 | 1,8 | - | - |

Source: Socio-Economic Household Survey, 2020

### Expenses

Detailed information about the expenses of households is available in the table below.

Table 2‑12. Expense Information of Households

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expenses | Number of Households | Average Expense (TRY) | Min. Expense (TRY) | Max. Expense (TRY) | Median Expense (TRY) |
| Infrastructure (Heating, electricity, communication etc.) | 106 | 5,437 | 500 | 36,000 | 5,000 |
| Food | 108 | 9,749 | 400 | 50,000 | 9,300 |
| Clothing | 40 | 2,930 | 300 | 12,000 | 1,750 |
| Education | 28 | 10,800 | 200 | 50,000 | 5,000 |
| Health | 19 | 1,016 | 100 | 5,000 | 1,000 |
| Transportation | 3 | 1,900 | 200 | 5,000 | 500 |
| Fuel | 69 | 7,039 | 1,000 | 30,000 | 5,000 |
| Livestock | 29 | 35,548 | 1,140 | 180,000 | 20,000 |
| Agriculture | 87 | 40,602 | 300 | 600,000 | 14,000 |
| Debt/Credit | 24 | 32,003 | 600 | 150,000 | 11,000 |
| Other | 1 | 31,200 | 31,200 | 31,200 | 31,200 |
| Total | 112 |  |  |  |  |

Source: Socio-Economic Household Survey, 2020

As seen in the following figure created based on the data in the table, 4 top items in household expenditures are kitchen, infrastructure, agricultural expenses and fuel. On the other hand, the most average expense among the expenditures made belongs to agricultural expenses and livestock production expenses. Accordingly, it is understood that agriculture, fruit growing and livestock production expenses have an important place in the household expenditures of the vast majority of PAPs. As stated in Table 5 provided at the beginning of the section, the borrowing ratio of households is 14.3%. In parallel with this data, it is noteworthy that debt/loan repayments rank third.

Figure 2‑7. Expense Items of Households

## Agricultural Activities and Land Use

As in Turkey, the size of cultivated agricultural parcels divided by the registered number of farmers has gradually decreased by years in Isparta. Currently, the total number of farmers in Isparta is 40,000, and the number of farmers registered in FRS (Farmer Registration System) is 21,673. The average land size is 39.15 decares per farm, which is lower than the average of Turkey (59 decares).

Table 2‑13. Farmer Registration System Data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Farmer Registration System | Number of Farmers | Cultivated Area (Da) | Average Parcel Size (Da) | Average Land Size Per Business (Da) | Number of Parcels | Average Number of Parcels per Business |
| 21,673 | 848,575 | 3.10 | 39.15 | 269,484 | 12 |

Source: 2018 Briefing of Provincial Directorate of Agriculture and Forestry of Isparta

According to the Farmer Registration System data obtained by DSI within the scope of the ESMP, 46.4% of Atabey WUA, which has an area of 12,587 ha, belongs to 5 settlements of Atabey. 5,509 ha of the said areas are registered with Atabey WUA, and irrigated agriculture is carried out on an area of 2,714 ha. There are 16,350 parcels in the project area, and the average parcel size is 0,3 ha.

According to the FRS, rainfed agriculture is carried out on 5,509 hectares of land, and the most important products are barley, vetch and wheat. In irrigated fields, mostly alfalfa, poplar, corn and sugar beet are grown. Key products in fruit and vegetable growing are apples, cherries, sour cherries, apricots, grapes, strawberries, kidney beans and fresh beans. Isparta ranks first in Turkey in apple production, fifth in sour cherry production and seventh in cherry production.

The chart below points out to a very rapid increase in vegetable and fruit production in the last 5 years.

Figure 2‑8. Agricultural Production by Years in Isparta

Rose, lavender and carnation are the main agricultural products used in the recently-developing medicinal and aromatic plants and chemicals sectors. Isparta is responsible for 83% of rose production in Turkey as well as 51% of lavender production and 13% of carnation production.

When the district-based crop pattern is examined, it is seen that apple, which is a strategically important product for Isparta, is grown in all of the settlements in the project area. Barley, alfalfa and tomato are also among the products commonly grown in the Project area. Similarly, carnation and oil rose, for the production of which Isparta has a significant share in Turkey, are among the products planted in Central and Eğirdir districts.

Table 2‑14. District-Based Crop Pattern

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| District | Agricultural Land (ha) | | | Existing Crop Pattern | Crop Pattern to be Supported on a Catchment Basis  . |
| Cultivated | Uncultivated | Total |
| Central | 14,938 | 2,487 | 17,425 | Table Tomato, Barley, Alfalfa, Apple, Carnation | Barley, Wheat, Beans, Chickpeas, Forage Crops, Potatoes, Safflower, Oats |
| Atabey | 7,006 | 1,473 | 8,479 | Sugar Beet, Apple, Barley, Corn for Silage, Alfalfa | Barley, Wheat, Triticale, Forage Crops, Oats, Safflower |
| Eğirdir | 13,513 | 7,977 | 21,490 | Apple, Wheat, Alfalfa, Table Tomato, Rose (Oil Rose) | Barley, Wheat, Forage Crops |
| Gönen | 13,596 | 3,981 | 17,577 | Barley, Apple, Table Tomato, Alfalfa, Sugar Beet | Barley, Safflower, Wheat, Forage Crops, Oats, Potatoes |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

The distribution of agricultural lands by districts is provided in the table below. Accordingly, among the districts in the impact area of the project, it is seen that fruit planting is available in Eğirdir district, vegetable cultivation in the Central district, and field crops in the Central district and Gönen district on a broader land than the others. Ornamental plants are cultivated only in the Central district. The largest agricultural land in terms of catchment area is in Eğirdir. The total agricultural land in 4 districts constitutes approximately 26% of the total agricultural land in Isparta, and 25% of this land is not cultivated.

Table 2‑15. Distribution of Agricultural Lands by Districts (Da)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Districts | Fruit | Fallow Land | Vegetable | Ornamental Plant | Field | Uncultivated Land | Total |
| Central | 27,170 | 43,112 | 7,110 | 646 | 71,341 | 24,870 | 174,249 |
| Atabey | 10,441 | 16,000 | 3,142 | 0 | 40,476 | 14,730 | 84,789 |
| Eğirdir | 64,627 | 40,162 | 1,989 | 0 | 28,352 | 79,770 | 214,900 |
| Gönen | 14,445 | 48,000 | 1,774 | 0 | 71,737 | 39,810 | 175,766 |
| Isparta | 415,741 | 321,618 | 56,003 | 646 | 1,236,266 | 482,550 | 2,512,824 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

Considering the distribution of agricultural enterprises in the Project area, where agriculture is the main source of income, it is seen that the majority of the enterprises are **concentrated on small-scale lands**. Among the districts, 6 enterprises with a land size of 501-1,000 stand out only in Gönen. In the project impact area, 58% of the agricultural enterprises have a land of less than 20 decares, and 36% of them between 21 and 100 decares. Most agricultural enterprises are located in Eğirdir, while the least agricultural enterprises are located in Atabey district. Enterprises in the project area constitute 30% of the total agricultural holdings of Isparta province.

Table 2‑16. Agricultural Enterprises Distribution by Land Size in Districts

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Districts | <5-20 | 21-100 | 101-500 | 501-1000 | 1001-2500 | Total |
| Central | 994 | 707 | 102 | 2 | 0 | 1,805 |
| Atabey | 497 | 304 | 79 | 2 | 1 | 883 |
| Eğirdir | 1.758 | 685 | 22 | 0 | 1 | 2,466 |
| Gönen | 510 | 637 | 124 | 6 | 0 | 1,277 |
| Isparta | 10.142 | 10.093 | 1,420 | 14 | 4 | 21,673 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

Landowners periodically need agricultural labor. Seasonal labor is needed for harvesting and landscaping. Relatively less seasonal workforce is required for irrigation. Seasonal workers reside in these districts with their families in April-May and September-October. Daily workers are provided from nearby settlements. While the income of male workers is TL 60-70/day, the income of women is between TL 50-60/day.

According to the data on the irrigability of the agricultural lands in Isparta, 99% of total agricultural lands are irrigable land.

Figure 2‑9. Irrigation of Agricultural Lands in Isparta

However, only about 20% of these irrigable lands are actually irrigated. This is one of the clear indicators of the need for modernization in irrigation.

Table 2‑17. Irrigation Status of Agricultural Lands in Isparta

|  |  |
| --- | --- |
| Irrigation Status | Area (Ha) |
| Total Agricultural Land | 251,282 |
| Irrigable Land | 248,173 |
| Irrigated Land | 49,257 |
| Non-Irrigated Land | 3,109 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

According to the table below showing the sources of agricultural irrigation, the share of surface irrigation is 57% among the irrigation sources used in the total irrigated land, and 82% of such irrigation is provided through DSI's irrigation canals. Likewise, the share of underground irrigation is 26%, and approximately 22% of this is performed by DSI. In the light of this information, it is held that particularly the modernization of DSI's surface irrigation canals will make a significant difference in terms of agricultural irrigation in the region.

Table 2‑18. Irrigation Source Distribution in Irrigated Agricultural Lands (Ha)

|  |  |  |
| --- | --- | --- |
| Irrigation Source | DSI | Total |
| Pond-Dam | 14,831 | 18,505 |
| Surface Irrigation | 56,428 | 68,847 |
| Underground Irrigation | 6,741 | 30,979 |
| Land Irrigation Loan | 0 | 2,157 |
| Total | 78,000 | 120,488 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

### Agriculture

The table below gives information about the existing lands of the surveyed households. Accordingly, the average size of the lands where the most common activity of fruit growing is performed is approximately 18 decares, and the average size of the agricultural fields is approximately 43 decares. Vineyards, vegetable patches and woodlands are located on very small lands. Based on these data, it is held that the lands in the affected settlements have a fragmented structure. In terms of irrigation, it can be predicted that the excessive amount of fragmented lands is one of the factors that reduce the irrigation rate and efficiency.

Table 2‑19. Existing Lands of Households

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type |  | Household  Number (n) | Number of Household Members (%) | Average (decare) | Median (decare) | Min. (decare) | Max. (decare) |
| Vineyard |  | 16 | 8.6 | 2.5 | 2.1 | 0.1 | 7.0 |
| Field | Registered | 56 |  | 30.7 | 10.5 | 0.5 | 70 |
| Non-registered | 4 |  | 187.3 | 22.5 | 2.0 | 702 |
| Total | 58\* | 31.4 | 42.9 | 11.2 | 0.5 | 742.4 |
| Vegetable patch |  | 13 | 7 | 2.7 | 2.0 | 0.5 | 10 |
| Orchard |  | 86 | 46.5 | 17.6 | 11.0 | 0.2 | 97 |
| Woodland (Poplar, walnut, etc.) |  | 2 | 1.1 | 0.5 | 0.5 | 0.4 | 0.5 |
| Other |  | 10 | 5.4 | 3.9 | 3.5 | 0.2 | 10 |
| Total |  | 185 |  |  |  |  |  |

Source: Socio-Economic Household Survey, 2020

\* The total number of households is 58, not 60, since 2 people have both registered and non-registered land.

According to the table below on the use of agricultural lands:

* The total agricultural area of Atabey district is 57,046 decares. 63.42% of this area is planted with grains and other plants, 17.50% with fruits, beverage plants and spices, and 4.47% with vegetables whereas 14.4% is fallow land.
* The total agricultural area of Eğirdir district is 97,108 decares. 25.78% of this area is planted with grains and other plants, 67.29% with fruits, beverage plants and spices, and 1.30% with vegetables while 5.15% is fallow land.
* The total agricultural area of Gönen district is 133,850 decares. 51.89% of this area is planted with grains and other plants, 10.29% with fruits, beverage plants and spices, and 1.79% with vegetables whereas 35.86% is fallow land.
* The total agricultural area of the Central district is 148,420 decares. 50.93% of this area is planted with grains and other plants, 26.13% with fruits, beverage plants and spices, 2.72% with vegetables and 0.18% with ornamental plants while 23.68% is fallow land.
* Eğirdir, Gönen, Atabey and Central districts, which all remain within the project area, make up 23.22% of the total agricultural lands of Isparta province. These 4 districts make up 17.89% of the total grains and other herbal products cultivation area, 27.85% of the fruits, beverages and spice plants cultivation area, 39.55% of the fallow area, 22.11% of the vegetable cultivation area, and the whole of ornamental plant cultivation area.

Table 2‑20. Use of Agricultural Lands in the Districts within the Project Area in 2019

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Districts | Cultivation Area for Grains and Other Plant Products | | Cultivation Area for Fruits, Beverage Plants and Spices | | Fallow Land | | Vegetable Patch | | Cultivation Area for Ornamental Plants | | TOTAL | |
| Da | % | Da | % | Da | % | Da | % | Da | % | Da | % |
| Atabey | 36,294 | 63.62 | 9,982 | 17.50 | 8,219 | 14,41 | 2,551 | 4.47 | - | - | 57,046 | 100 |
| Eğirdir | 25,030 | 25.78 | 65,342 | 67.29 | 5,000 | 5.15 | 1,736 | 1.79 | - | - | 97,108 | 100 |
| Gönen | 69,460 | 51.89 | 14,655 | 10.95 | 48,000 | 35.86 | 1,735 | 1.30 | - | - | 133,850 | 100 |
| Central | 75,586 | 50.93 | 24,072 | 16.22 | 42,132 | 28.39 | 5,861 | 3.95 | 769 | 0.52 | 148,420 | 100 |
| Total | 206,370 | 47.29 | 114,051 | 26.13 | 103,351 | 23.68 | 11,883 | 2.72 | 769 | 0.18 | 436,424 | 100 |
| Isparta Total | 1,153,808 | | 409,517 | | 261,289 | | 53,756 | | 769 | | 1,879,139 | |
| % | 17.89 | | 27.85 | | 39.55 | | 22.11 | | 100.00 | | 23.22 | |

Source: Land Market Research Report, HAPA, 2020.

According to the surveys conducted with mukhtars, the fruits produced for income in settlements are listed in the table below. In the light of this information, Beydere (Eğirdir), Büyükgökçeli (Central), Harmanören (Atabey), Aliköy (Central) and Kuleönü (Central) stand out as the settlements with the highest variety of fruit produced for income (4 varieties). It is observed that there is no fruit production for income in Küçükhacılar, which is also a settlement connected to the Central district. As explained in the previous sections, Küçükhacılar is a settlement where trade is the main source of income.

Table 2‑21. Fruits Produced for Income in Settlements

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Cherry | Apple | Peach | Walnut | Plum | Apricot | Rose | Sour Cherry |
| Bayat | **X** | **X** |  |  | **X** |  |  |  |
| Beydere | **X** | **X** | **X** |  |  | **X** |  |  |
| Büyükgökçeli | **X** | **X** | **X** |  | **X** |  |  |  |
| Cami |  | **X** |  |  |  |  |  | **X** |
| Harmanören | **X** | **X** | **X** |  | **X** |  |  |  |
| İslamköy | **X** |  | **X** |  |  |  |  |  |
| Küçükgökçeli | **X** | **X** | **X** |  |  |  |  |  |
| Senirce |  | **X** |  | **X** |  |  |  |  |
| Sevinçbey | **X** | **X** | **X** |  |  |  |  |  |
| Aliköy | **X** | **X** | **X** | **X** |  |  |  |  |
| Bozanönü | **X** |  | **X** |  |  |  |  |  |
| Büyükhacılar | **X** |  |  |  |  |  | **X** |  |
| Yazısöğüt | **X** |  |  | **X** |  |  |  |  |
| Küçükhacılar |  |  |  |  |  |  |  |  |
| Kuleönü | **X** | **X** | **X** | **X** |  |  |  |  |

Source: Mukhtar Surveys, 2020

According to the table below, which includes information about the products grown the most in the surveyed households, the products with the highest number of producer households are peach and apple, and the products with the **highest annual average income** are **plum and apple**.

Table 2‑22. Annual Income from Top Crops

|  |  |  |
| --- | --- | --- |
| Name of the crop | Annual Average Income (TL) | Number of Cultivating Households |
| Apple | 57,500 | 37 |
| Peach | 22,278 | 41 |
| Cherry | 9,558 | 22 |
| Barley | 9,321 | 21 |
| Walnut | 6,400 | 18 |
| Plum | 139,100 | 11 |
| Rose | 6,588 | 10 |
| Grape | 2,417 | 9 |

Source: Socio-Economic Household Survey, 2020

The ratio of field crops grown in the neighborhoods of the Project area to the field crops cultivation areas in Isparta is provided in the following figure taken from the Land Market Research Report prepared by HAPA. The ratio of field crops cultivation area in Atabey district to Isparta province is 3.19%, whereas the same ratio for Eğirdir, Gönen and Central districts is 2.12%, 6.05% and 6.35% respectively. The share of districts, excluding the land remaining in the project area, is 82.29%. In line with household surveys, these data show that fruit growing is much more common in affected settlements than field crops. In these settlements, barley stands out compared to other field crops.

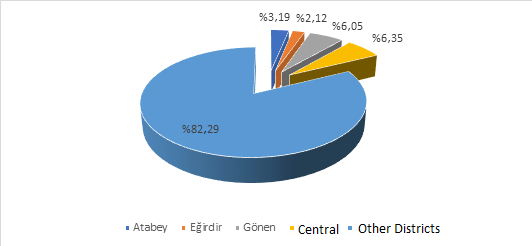


Figure 2‑10. Impacted Neighborhoods Field Crops Cultivation Area to Isparta Province

According to household surveys, 97% of agricultural irrigation in settlements is done through irrigation canals, and the use of well and stream water is almost nonexistent. This is also in line with Table 2.18, which shows the distribution of agricultural irrigation resources in Isparta, as provided at the introduction of the section. In Isparta, surface irrigation is 2 times more common than underground irrigation.

Figure 2‑11. Irrigation Sources of PAPs

During interviews, PAPs were asked about their views on irrigation. Approximately 65% of PAPs cultivate their irrigated agricultural land. **The proportion of unused irrigated agricultural lands in settlements is also high.** However, insufficiency of irrigation water does not appear to be the main reason among the reasons for not using these lands because 73% of PAPs think that irrigation water is sufficient.

Table 2‑23. Opinions of PAPs on Irrigation Water

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Do you plant all the parcels? | Is there any irrigated but unused land? | Is irrigation water enough? | Will irrigation modernization change the crop pattern? |
| Yes (%) | 63.4 | 58.0 | 73.1 | 29.6 |
| No (%) | 36.6 | 42.0 | 26.9 | 70.4 |

Source: Socio-Economic Household Survey, 2020

On the other hand, in the meetings with mukhtars, the majority of the mukhtars **pointed out to irrigation water as the most important problem in the village**. Settlements that pointed out to irrigation water as an important problem are Aliköy (Central), Bayat (Atabey), Bozanönü (Central), İslamköy (Atabey) and Senirce (Gönen).

PAPs have low expectations that the crop pattern will change after the modernization of the irrigation infrastructure. The predictions of the respondents who think that the crop pattern will change with the modernization of irrigation are shown below. When these crop preferences were listed, PAPs indicated their most preferred crops to plant such as **alfalfa, beans and walnuts**. Their second preference was for vegetable and fruit varieties, and their third preference was for barley and wheat.

Figure 2‑12. Possible Impact of the Project on the Product Pattern

Among the problems raised by farmers engaged in irrigated farming among the surveyed households, lack of water is the main problem. High wages as well as late arrival and early cut-off of the water are the other problems raised most commonly. The Irrigation Modernization Project is particularly expected to eliminate these problems.

Figure 2‑13. Priority Problems of PAPs Regarding Irrigation

Rate of the surveyed PAPs using the lands they do not own is approximately 17%. It is seen that most of these lands are irrigated land rented in terms of the number of households and non-irrigated land rented in terms of average decare.

Table 2‑24. Use of the Lands Not Owned By PAPs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Non-registered land | Number of households | Average (decare) | Median (decare) | Minimum (Decare) | Maximum (Decare) |
| Rented non-irrigated land | 7 | 119 | 20 | 7 | 700 |
| Non-registered Treasury land | 2 | 14 | 14 | 2 | 25 |
| Those using irrigated fields of others without any contract | 2 | 3 | 3 | 2 | 5 |
| Rented irrigated land | 12 | 42 | 10 | 2 | 200 |
| Total | 19 | 71 | 12 | 3 | 702 |

Source: Socio-Economic Household Survey, 2020

Information on the number and types of trees grown by the surveyed households are given in the table below. The top 3 trees grown by most households are peach, apple and cherry respectively. The most numerous trees are apple, plum and peach respectively. It was stated above that walnuts are among the products that will increase after irrigation modernization. As can be seen in the table below, the average number of walnut trees owned according to the number of households owning walnuts is quite low compared to the others. According to the interviews, it can be predicted that PAPs will increase the planting of walnut trees once irrigation is available.

Table 2‑25. Species and Number of Trees Planted

|  |  |  |  |
| --- | --- | --- | --- |
| **Tree Species** | **Number of households** | **%** | **Number of Trees (Average)** |
| **Peach** | 56 | 28.5 | 335 |
| **Apple** | 50 | 25.5 | 1130 |
| **Cherry** | 30 | 15.3 | 100 |
| **Walnut** | 28 | 14.3 | 20 |
| **Plum** | 15 | 7.7 | 361 |
| **Quince** | 12 | 6.1 | 88 |
| **Grapevine** | 5 | 2.6 | 264 |
| **TOTAL** | **196** | **100** |  |

Source: Socio-Economic Household Survey, 2020

### Livestock Production

Cattle, ovine and poultry farming, fresh water fisheries and beekeeping are common in Isparta, the center of the lakes region. Considering the change in the number of animals between 2002 and 2018, it is seen that there is a significant increase in the number of cattle and poultry. In Turkey rankings, Isparta ranks higher in terms of ovine breeding.

Table 2‑26. Number of Animals in Isparta Province

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Number of Animals | | | 2018 Turkey Rankings |
| **2002** | **2018** | **Change (%)** |
| Bovine | 62,413 | 145,012 | 132 | 48 |
| Ovine | 312,638 | 491,550 | 57 | 36 |
| Poultry | 199,549 | 445,574 | 123 | 54 |
| Beehives with Bees | 22,562 | 32,527 | 44 | 64 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

According to the following data showing the number of livestock enterprises in the province, cattle breeding enterprises are 3 times more than ovine breeding enterprises. Both bovine and ovine livestock enterprises mostly have 50 animals or less. Large-scale enterprises are more numerous in ovine breeding.

Table 2‑27. Number of Livestock Enterprises in Isparta Province

|  |  |  |
| --- | --- | --- |
| Enterprise Size (No. of Animals) | Bovine | Ovine |
| 1-20 | 12,013 | 1,115 |
| 21-50 | 1,091 | 1,040 |
| 51-100 | 336 | 995 |
| 101-200 | 62 | 942 |
| 200-500 | 7 | 605 |
| 501 and above | 2 | 78 |
| Total | 13,511 | 4,775 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

There are a total of 120 milk collection centers in Isparta province. The distribution of these centers by districts in the Project area is shown below.

Table 2‑28. Milk Collection Centers by Districts

|  |  |  |
| --- | --- | --- |
| District | Number | Capacity (Lt./Day) |
| Central | 8 | 19,912 |
| Atabey | 6 | 17,165 |
| Eğirdir | 3 | 2,202 |
| Gönen | 7 | 5,823 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

According to the capacity of these centers in the districts, their share in the total of Isparta province is approximately 14%. The highest capacity is in Central and Atabey districts. Although the number of milk collection centers in Gönen is almost the same as these districts, the capacity of the centers in the former is low.

Figure 2‑14. Share of Districts in Isparta Milk Collection Capacity

When the grazing lands in the districts are examined, it is seen that the largest grazing area is in the Central district and the least in Eğirdir district, and there are no pastures in the districts except for the Central district in the project area.

Figure 2‑15. Grazing Lands in the Districts

Exports of aquaculture products are gradually increasing among the important income sources of Isparta. Trout, zander and crayfish are the leading aquaculture products that are processed and exported in 3 seafood processing plants. However, eel is another aquatic product produced in the region.

Table 2‑29. Aquaculture Products Exported in Isparta Province

|  |  |  |
| --- | --- | --- |
| Type | Export Quantity (kg) | Export Amount |
| Trout | 564,356 | USD 150,512 |
| EUR 1,715,000 |
| Zander | 215,226 | USD 1,130,522 |
| EUR 475,279 |
| Crayfish | 348,514 | USD 980,610 |
| Eel | 21,719 | USD 213,391 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

The status of the trout, which is an important source of income for the regional economy, in the districts within the Project area is provided in the figures below. Accordingly, the largest trout facility is in Eğirdir, while the highest production capacity is in Gönen, and the highest production is in Eğirdir and Gönen. Although the number of facilities in the Central district is high, the production amount is very low. 4 districts meet approximately 10% of the total trout production of Isparta.

Figure 2‑16. Number of Trout Facilities in Districts

Figure 2‑17. Capacity and Production Amounts of Trout Facilities in Districts

The district-based breakdown of the farmers who applied to the Young Farmer Program in 2018 by the Ministry of Agriculture and Forestry is provided in the table below. In 2018, the total number of projects supported under the program in Isparta was 183. The district that received the greatest support among all districts in the project area is Eğirdir. When all 4 districts are examined, it is seen that the most project applications are in the field of bovine animals (cattle). No application has been received from these districts for perennial fodder plants and bovine animals (water buffalo).

Table 2‑30. Young Farmer Program Results in Districts

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| District | Beekeeping | Bovine (Cattle) | Perennial Fodder Plant | Poultry | Ovine (Sheep) | Mushroom Cultivation | Greenhouse Facility | Medicinal Aromatic Plants | Bovine (Water Buffalo) | Total |
| Central | 2 | 8 | - | - | 2 | 1 | 1 | - | - | 14 |
| Atabey | - | 2 | - | - | 2 | - | - | - | - | 4 |
| Eğirdir | 3 | 11 | - | 1 | 3 | 6 | 1 | 1 | - | 26 |
| Gönen | 1 | 2 | - | - | 1 | 1 | - | - | - | 5 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

According to the surveys conducted with mukhtars, the distribution of the number of households engaged in bovine and ovine breeding is provided in the figure and table below. The settlements with the highest number of households engaged in bovine breeding are Aliköy, İslamköy, Büyükgökçeli and Bozanönü respectively, while the settlements with the highest number of households engaged in ovine breeding are Küçükhacılar, Büyükhacılar, Kuleönü and Senirce respectively. In the light of these data, it is possible to say that both types of breeding are much more common in settlements of the Central district.

Figure 2‑18. Number of Households Engaged in Bovine and Ovine Breeding

The number of animals in the settlements is given in the table below according to the data obtained from both the mukhtar surveys and the Provincial and District Directorates of Agriculture. Accordingly, the greatest number of bovine animals are in Aliköy while Büyükhacılar has the highest number of ovine animals. These data are also consistent with the ‘Prioritization of Sources of Income for the Settlements’ table (Table 2-9).

Table 2‑31. Number of Animals in the Settlements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | District | Settlements | Number of Bovine Animals | Number of Ovine Animals |
| 1 | **Atabey** | Bayat | 200 | 600 |
| 2 | Harmanören | 1,100 | 5,000 |
| 3 | İslamköy | 3,000 | 3,000 |
| 4 | **Eğirdir** | Beydere | 180 | 2,950 |
| 5 | Sevinçbey | 310 | 1,600 |
| 6 | **Gönen** | Cami | 300 | 700 |
| 7 | Senirce | 200 | 600 |
| 8 | **Central** | Aliköy | 3,500 | 5,000 |
| 9 | Bozanönü | 1,400 | 2,000 |
| 10 | Büyükgökçeli | 700 | 2,000 |
| 11 | Büyükhacılar | N/A | 30,000 |
| 12 | Kuleönü | 300 | 800 |
| 13 | Küçükgökçeli | 100 | 150 |
| 14 | Küçükhacılar | 15 | 6,000 |
| 15 | Yazısöğüt | 600 | 300 |

Source: Mukhtar Surveys and Provincial/District Directorate of Agriculture and Forestry, 2020

According to the information obtained from mukhtars, poultry farming is carried out in only 3 settlements while beekeeping is performed in 4 settlements. The information in the table below shows that Büyükgökçeli and Yazısöğüt of the Central district lead beekeeping activities while Bozanönü of the Central district stand out in poultry farming.

Table 2‑32. Poultry and Beekeeping in the Settelements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Beekeeping | | Poultry | | |
| Settelement | **Number of Household** | **Number of Beehive** | **Settlement** | **Number of Household** | **Number of Animals** |
| Aliköy | 5 | N/A | Bozanönü | 2 | 250,000 |
| Bayat | 2 | 250 | Büyükgökçeli | 1 | 1,000 |
| Büyükgökçeli | 5 | 500 | İslamköy | 2 | 2,000 |
| Yazısöğüt | 5 | 500 |  |  |  |

Source: Mukhtar Surveys, 2020

There are a total of 642 animals in 112 households surveyed in the project-affected settlements. 53% of these animals is bovine, and 47% is ovine. The number of households dealing with animal husbandry is 42 in total.

Figure 2‑19. Number of Animals and Households Engagen in Animal Husbandry in the Settlements

Considering the information in the income section and the answers to the questionnaire, **it is seen that the vast majority of these households engage in animal husbandry for subsistence, and only 14% of them earn income from this activity.**

Table 2‑33. Households Selling Animal Products

|  |  |  |
| --- | --- | --- |
|  | Do you have animals? | Do you sell animal products? |
| Yes | 29% | 14% |
| No | 71% | 86% |

Source: Socio-Economic Household Survey, 2020

According to the interviews and surveys, the main income obtained from bovine breeding is through milk production and sales. The number of households selling milk is 16 in total. PAPs stated that they mostly sell the milk they produce to the Milk Association and dairy farmers.

According to the information received from mukhtars, there are dairy farms in 2 of the settlements of the Central district. It is reported that there is 1 dairy farm in Büyükhacılar but 30 in Kuleönü. Kuleönü stands out in terms of animal husbandry as it is the only place that is a town municipality among 15 settlements and also the settlement with the highest population.

Figure 2‑20. Ownership of Forage Crop Lands

27 of the households engaged in animal husbandry in the settlements plant forage crops. The total fodder crop land cultivated by these households is approximately 571 decares, and 51% of the households use their neighbors' land for forage crop cultivation. The most cultivated fodder crop is barley. 7 households plant more than one forage crop.

Figure 2‑21. Number of Households Planting Forage Crops

Information about the size of the pasture lands in the settlements was obtained from the mukhtars who were interviewed. In the table below, along with the pasture sizes, the animal numbers of 10 settlements are provided for comparison. Especially in settlements such as Büyükhacılar, Küçükhacılar and Aliköy, where the number of animals is much higher, it is clearly seen that the size of the pastures is insufficient. Most of the mukhtars emphasized that the rangelands are insufficient in terms of both their size and the quality of the grass. According to the information obtained from the households breeding livestock, **pasture land and grazing areas are insufficient** in the affected settlements. 85% of these households find their grazing land insufficient and therefore feed their animals in the barn.

Table 2‑34. Size of the Pasture Lands in the Settlements

|  |  |  |  |
| --- | --- | --- | --- |
| Settlement | Pasture Size  (Decare) | Number of Bovine | Number of Ovine |
| Aliköy | 600 | 3,500 | 5,000 |
| Bayat | 500 | 200 | 600 |
| Beydere | 136 | 30 | 2,000 |
| Büyükgökçeli | 60 | 700 | 2,000 |
| Büyükhacılar | 70 | - | 30,000 |
| Cami | 47 | 300 | 700 |
| İslamköy | 5,000 | 3,000 | 3,000 |
| Küçükgökçeli | 100 | 100 | 150 |
| Küçükhacılar | 50 | 15 | 60,000 |
| Yazısöğüt | 25 | 600 | 300 |

Source: Mukhtar Surveys, 2020

## Organization

Isparta is a province with a developed agricultural organization. There are many producers and breeders unions and cooperatives in the field of agriculture and livestock throughout the province. The cooperatives in the districts within the project area are provided in the table below. Accordingly, in terms of the number of cooperatives and members, Eğirdir district comes first, followed by the Central district. Atabey is the weakest district in terms of cooperatives.

Table 2‑35. Breakdown of Cooperatives by Settlements

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Agricultural Development Cooperatives | | Water Users Cooperatives | | Aquaculture Cooperatives | |
| District | **Number** | **Number of Members** | **Number** | **Number of Members** | **Number** | **Number of Members** |
| Central | 10 | 994 | 11 | 2,403 | 0 | 0 |
| Atabey | 1 | 102 | 0 | 0 | 0 | 0 |
| Eğirdir | 15 | 1,674 | 15 | 2,954 | 4 | 217 |
| Gönen | 3 | 135 | 7 | 1,417 | 0 | 0 |

Source: 2018 Briefing by Isparta Provincial Directorate of Agriculture and Forestry

There are a total of 13 producer/breeder unions in Isparta. Among these unions, those serving all districts are as follows:

* Breeding Dairy Cattle Breeders Association
* Sheep&Goat Breeders Association
* Beekeepers Association
* Isparta Province Inland Aquaculture Producers Association
* TAR-KOOP Agricultural Cooperatives Regional Union
* HAY-KOOP Livestock Cooperatives Regional Union

In addition, there are 2 other unions in the Central district within the Project area. These are the Central Dairy Producers Union and Central Red Meat Producers Union.

According to the information obtained from the Chambers of Agriculture in the project area, the number of female and male PAPs registered in the Chambers of Agriculture is provided in the table below. Accordingly, the settlements with the highest number of members are Kuleönü, Büyükgökçeli and İslamköy. 18% of the total registered members are women.

Table 2‑36. Number of Members of Chambers of Agriculture in the Settlements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Chamber of Agriculture | Settelements | Number of Registered Members | Number of Female Members | Number of Male Members |
| 1 | **Atabey** | Bayat | 31 | 6 | 25 |
| 2 | Harmanören | 189 | 35 | 154 |
| 3 | İslamköy | 351 | 55 | 296 |
| 4 | **Eğirdir** | Beydere | 168 | 52 | 116 |
| 5 | Sevinçbey | 110 | 24 | 86 |
| 6 | **Gönen** | Cami | N/A | N/A | N/A |
| 7 | Senirce | N/A | N/A | N/A |
| 8 | **Central** | Aliköy | 245 | 52 | 193 |
| 9 | Bozanönü | 167 | 45 | 122 |
| 10 | Büyükgökçeli | 364 | 54 | 310 |
| 11 | Büyükhacılar | 91 | 10 | 81 |
| 12 | Kuleönü | 402 | 65 | 337 |
| 13 | Küçükgökçeli | 124 | 21 | 103 |
| 14 | Küçükhacılar | 103 | 11 | 92 |
| 15 | Yazısöğüt | 72 | 13 | 59 |
| Total | | | **2,506** | **451** | **2,055** |

Source: Provincial and District Chambers of Agriculture, 2020

According to the surveys conducted with PAPs in the settlements affected by the Project, the most common types of organizations where PAPs are members are Unions, Chambers and Cooperatives. The organizations with the largest number of PIP members are Atabey Water Users Association (103 people), Isparta Chamber of Agriculture (41 people) and Büyükgökçeli Agricultural Credit Cooperative (18 people) respectively. Detailed information on the memberships of PAPs is provided in the table below.

Table 2‑37. Organizations Where PAPs Are Members

|  |  |
| --- | --- |
| Organization/Institution | Number of PAP Members |
| *Cooperatives* | |
| Antalya Agricultural Credit Cooperative | 1 |
| Büyükgökçeli Agricultural Credit Cooperative | 18 |
| Eğirdir Agricultural Credit Cooperative | 5 |
| Isparta Agricultural Credit Cooperative | 9 |
| Other Agricultural Credit Cooperative | 9 |
| TOTAL | **42** |
| *Unions* | |
| Atabey Water Users Association | 103 |
| Isparta Cattle Breeders Association | 9 |
| Isparta Beekeepers Association | 1 |
| Atabey Cherry Growers Association | 2 |
| Beet Union | 1 |
| Milk Union | 1 |
| TOTAL | **117** |
| *Chambers* | |
| Chamber of Craftsman | 2 |
| Chamber of Trade | 1 |
| Atabey Chamber of Agriculture | 14 |
| Eğirdir Chamber of Agriculture | 16 |
| Isparta Chamber of Agriculture | 41 |
| Enerji Bir Sen | 1 |
| Commodity Exchange | 1 |
| TOTAL | **76** |

Source: Socio-Economic Household Survey, 2020

### Water Users Association

According to the information received by HAPA from the Water Users Association (WUA), in terms of the irrigation results for 2019,

* Irrigation rate in settlements is 30.84%, which is quite low.
* The number of people benefiting from WUA irrigation services is 5,225 in total, and the total number of parcels is 16,490.
* Average parcel size benefiting from irrigation is 2.6. Parcel sizes vary between 0.94 decares (Büyükgökçeli) and 21.45 decares (Gönen). The median parcel size is 2.6 decares.

Table 2‑38. Irrigation Area, Rate, Average Parcel Size in the Settlements Affiliated to the WUA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Settlement\* | Area Opened to Irrigation (da) | Actually Irrigated Area (da) | Irrigation Rate % | Number of Taxpayers | Number of Parcels | Average Parcel Size (da) |
| Aliköy | 9 480 | 502.91 | 5.31 | 288 | 529 | 0.95 |
| Atabey1 | 17 100 | 3 893.79 | 22.77 | 633 | 2 267 | 1.72 |
| Bayat | 2 000 | 253.26 | 12.66 | 96 | 153 | 1.66 |
| Beydere | 2 500 | 2 400.41 | 96.02 | 126 | 835 | 2.87 |
| Bozanönü | 11 125 | 1 788.52 | 16.08 | 135 | 474 | 3.77 |
| Büyükgökçeli | 7 000 | 3 335.38 | 47.65 | 771 | 3 556 | 0.94 |
| Büyükhacılar | 2 770 | 354.02 | 12.78 | 160 | 348 | 1.02 |
| Gönen2 | 10 880 | 5 490.53 | 50.46 | 94 | 256 | 21.45 |
| Harmanören | 9 625 | 4 536.34 | 47.13 | 422 | 1 585 | 2.86 |
| İslamköy | 23 500 | 9 490.35 | 40.38 | 687 | 2 550 | 3.72 |
| Kuleönü | 27 060 | 2 923.58 | 10.80 | 1 032 | 2 071 | 1.41 |
| Küçükgökçeli | 4 335 | 2 352.21 | 54.26 | 419 | 1 006 | 2.34 |
| Pembeli3 | 2 250 | 548.52 | 24.38 | 122 | 319 | 1.72 |
| Senirce | 6 625 | 3 048.49 | 46.01 | 92 | 243 | 12.55 |
| Sevinçbey | 2 500 | 1 874.93 | 75.00 | 148 | 298 | 6.29 |
| Total | 138 750 | 42 793.25 | 30.84 | 5 225 | 16 490 | 2.60 |

1: The settlement unit referred to as Atabey is included in the project as a district.

2: There are parcels affected by the project in Cami Neighborhood, which is one of the 6 quarters of Gönen district.

3: Pembeli Neighborhood is not included in the project area.

\*: Data are not available for Atabey-Onaç, Central-Küçükhacılar, Central-Yazısöğüt neighborhoods in the project area.

The area irrigated by Atabey WUA in 2019 is 42,793 decares. Out of that,

* 30.56% is irrigated by drip irrigation, 28.34% by drilling irrigation, 27.67% by normal (wild) irrigation, 11.95% by sprinkler irrigation, and 1.49% by lake irrigation.
* The irrigated areas in 2019 decreased by 7.95% compared to 2018 and by 8.20% compared to 2017. With the decrease in irrigated areas, there is a decrease in wild irrigation areas.
* The share of normal irrigation, which was 37.22% in 2017, decreased to 27.67% in 2019. Wild irrigation areas in 2017 decreased by 31.75% to 11,841 decares in 2019.

Table 2‑39. Atabey Water Users Association Data for the Last 3 Years

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Irrigation Types/Years | 2017 | | 2018 | | 2019 | |
| **Da** | **%** | **Da** | **%** | **Da** | **%** |
| Normal Irrigation | 17,350 | 37.22 | 13,379 | 28.78 | 11,841 | 27.67 |
| Drip Irrigation | 15,500 | 33.25 | 14,760 | 31.75 | 13,076 | 30.56 |
| Sprinkler Irrigation | 4,000 | 8.58 | 4,650 | 10.00 | 5,112 | 11.95 |
| Drilling Irrigation | 9,763 | 20.95 | 13,700 | 29.47 | 12,127 | 28.34 |
| Lake Irrigation | - | - | - | - | 637 | 1.49 |
| Total | 46,613 | 100 | 46,489 | 100 | 42,793 | 100 |

Source: Atabey Water Users Association, 2020

According to the data obtained from Atabey Water Users Association, production is carried out in a total area of 42,793 decares. 41% of this area is used to grow fruits, with 13% and 11% being used to grow forage crops and sugar beet respectively. The breakdown of crops grown is provided below.

Figure 2‑22. Registered Production with Atabey Water Users Association

## Vulnerable Groups and Social Assistance Supports

### Vulnerable Groups

According to the surveys conducted in the settlements affected by the Project,

* Approximately 11% of the household heads are women. 2 of these female household heads are unemployed.
* 5% of 112 household heads are unemployed.
* 3% of the household heads do not have any social security.
* PAPs include 7 disabled individuals (physical, mental and hearing impairment, chronic health problems). 2 of these disabled individuals are household heads.
* The proportion of PAPs over 65 within total PAPs is 72%.
* The interviews revealed no landless PAPs or, in other words, PAPs without any private land.

Since the socio-economic survey and, accordingly, the identification of vulnerable groups were performed based on sampling, not all vulnerable groups were identified during the survey. Therefore, vulnerable groups will be identified based on the forms specified in Annex 11 as a result of consultations and interviews to be made in settlements during the RAP implementation process and mitigation measures will be developed in line with the entitlement matrix.

According to the interviews with mukhtars of the affected settlements,

* There are 148 households in need and 323 people in need in 15 settlements.
* There are 61 mentally/physically disabled individuals in 53 households.
* A total of 78 people are over 65 and in need of care.

### Social Assistance Supports

According to the information received from the Social Assistance and Solidarity Fund (SYDV) interviewed within the scope of the field study, details regarding the supports offered to the settlements covered by the Project are given below. Accordingly, in these settlements, the first three types of support benefited by the most people are cash assistance, old age pension and disabled pension respectively. It is observed that the PAPs benefiting support are mainly concentrated in Atabey. This indicates that among the Project-impacted settlements, settlements in Atabey should be handled more carefully regarding vulnerable groups.

Table 2‑40. Social Aid Supports Benefited by Households\*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | SYDV | Settlement | Number of Persons Receiving Disability Pension | Number of Persons Receiving Disabled Person’s Relative Pension | Number of People Receiving Conditional Education Aid | Number of People Receiving Widows Salary | Number of People Receiving Old Age Pension | Number of People Receiving Cash Assistance |
| 1 | **Atabey** | Bayat | - | - | 3 | - | 3 | 12 |
| 2 | Harmanören | 9 | 1 | 4 | - | 21 | 40 |
| 3 | İslamköy | 3 | - | 12 | 1 | 10 | 69 |
| 4 | Onaç | - | - | 2 | - | 8 | 24 |
| 5 | **Eğirdir** | Beydere | 1 | - | - | - | - | 1 |
| 6 | Sevinçbey | 1 | - | - | - | 8 | 8 |
| 7 | **Gönen** | Cami | - | - | - | - | - | - |
| 8 | Senirce | - | - | - | - | - | - |
| 9 | **Central** | Aliköy | - | - | - | - | - | - |
| 10 | Bozanönü | - | - | - | - | - | - |
| 11 | Büyükgökçeli | 4 | 2 | - | 1 | 7 | 2 |
| 12 | Büyükhacılar | - | - | - | - | - | - |
| 13 | Kuleönü | - | - | - | - | - | - |
| 14 | Küçükgökçeli | - | 1 | - | - | 3 | 1 |
| 15 | Küçükhacılar | - | - | - | - | - | - |
| 16 | Yazısöğüt | - | - | - | - | - | - |
| Total |  |  | 18 | 4 | 21 | 2 | 60 | 157 |

\*Coal aid and religious holiday aids given to all aid recipients as well as food, rent and accommodation aid are not included in this table.

According to the mukhtar surveys, the number of households receiving any support from SYDV in the impacted settlements is 231. Below is the distribution of the supported households by settlements. Accordingly, Harmanören (Atabey), Aliköy (Central), Onaç (Atabey), Senirce (Gönen) and Kuleönü (Central) are the leading settlements with the highest number of supported households.

Figure 2‑23. Distribution of the Supported Households by Settlements

# Potential Impacts

## Identification of Project Impacts

Land sizes and parcel types that are expected to be affected by the project are explained in the relevant sections based on the expropriation map covering 78 km as prepared by HAPA firm. Evaluations of mukhtars, PAPs and other local corporate stakeholders regarding the project's potential impacts were obtained and analyzed.

## Land Acquisition Impact

### Types of Affected Land

As a result of the studies carried out by the HAPA company, a total of 1,462 parcels were detected in 5 settlements. Considering the ownership distribution of these parcels, 1,341 parcels are privately owned, while 23 parcels belong to the treasury, 5 parcels are common public property, 9 parcels belong to legal persons (Isparta Municipality, Special Provincial Administration), and 81 parcels belong to DSI. The ownership of 3 parcels are disputed. The number of shareholders in private parcels is 2,604 people, with an average of 2 shareholders per parcel.

Table 3‑1. Breakdown of Affected Parcels by Settlements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Number of Settlements/Parcels | Private Property | Treasury | Legal Entity | Common Public Property | DSI | Disputed | Total |
| Beydere | 215 | 10 | 1 | 5 | 0 | 0 | 231 |
| Büyükgökçeli | 749 | 12 | 5 | - | 53 | - | 819 |
| Harmanören | 258 | 1 | - | - | 26 | - | 285 |
| Küçükgökçeli | 27 | - | - | - | 2 | - | 29 |
| Sevinçbey | 92 | - | 3 | - | - | 3 | 98 |
| Total | 1341 | 23 | 9 | 5 | 81 | 3 | 1462 |
| % | 92% | 2% | 1% | 0% | 6% | 0% | 100% |

Source: HAPA, 2020

34% of the affected lands are permanent land, 34% are temporary easement land, and 32% are expropriation land. For all lands, the project-affected area corresponds to 5% of the total registered areas. As indicated in the table below, 85% of the affected lands correspond to private lands.

Table 3‑2. Breakdown of Affected Parcels by Types

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Affected Area | Private Property | Treasury | Legal Entity | Common Public Property | DSI | Disputed | Total | Area/Title Deed Size % | Acquisition Type/Size of Affected Land % |
| Total Title Deed Area (m²) | 4,740,131 | 428,222 | 65,763 | 181,788 | 194,407 | 43,110 | 5,653,421 | 100% |  |
| Expropriated Area (m²) | 62,423 | 3,838 | 368 | 314 | 19,093 | 643 | 86,678 | 2% | 32% |
| Permanent Easement Area m² | 83,188 | 2,999 | 914 | 1,329 | 4,754 | 298 | 93,481 | 2% | 34% |
| Temporary Easement Area m² | 86,412 | 1,059 | 1,754 | 2,480 | 1,462 | 0 | 93,166 | 2% | 34% |
| Total Affected Area | 232,023 | 7,895 | 3,035 | 4,123 | 25,308 | 941 | 273,325 | 5% | 100% |
| Affected Area / Total Affected Area % | 85% | 3% | 1% | 2% | 9% | 0% | 100% |  |  |

Source: HAPA, 2020

### Individual Parcels by Acquisition Type and Duration of Impact

In land acquisition, leasing will be made, if necessary, together with property expropriation, permanent easement and temporary easement. Impacts for **private parcels** in 5 settlements have been evaluated according to each type of land acquisition and duration of impact (permanent impact) as well as total impact. The land acquisition impact is generally low, as the average of land affected by property expropriation and permanent easement accounts for 2% of the total private parcel sizes. However, as all 16 parcels in Harmanören are affected by expropriation, its impact on households may be significant. Summary table is provided below.

Table 3‑3. Types of Land Acquisition and Impact

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Types of Acquisition and Impact | Number of Privately-Owned Parcels | Average Parcel Size M² | Average Affected Area M² | Ratio of the Affected Area to the Title Deed Area Avg (M²) | Minimum Area M² | Maximum Area M² |
| A. Acquisition Method |  |  |  |  |  |  |
| 1. Ownership Expropriation | 535 | 5,310 | 117 | 2% | 0.1 | 2,427 |
| 2. Permanent easement | 1,116 | 3,493 | 75 | 2% | 0.1 | 1,725 |
| 3. Temporary Easement | 779 | 3,744 | 111 | 3% | 0.1 | 3,744 |
| B. Duration and Intensity of Impact |  |  |  |  | 0.1 |  |
| 1.Expropriation + Permanent Easement | 1,176 | 3,716 | 125 | 3% | 0.3 | 3,227 |
| 1.1. 100% of the Parcel Affected by Expropriation | 16 | 1,144 | 1,144 | 100% | 131 | 2,427 |
| 1.2. 20% or more of the parcel affected by expropriation and permanent easement | 14 | 552 | 255 | 46% | 11 | 1,988 |
| C. Total Impact |  |  |  |  |  |  |
| 1.Expropriation + Permanent Easement + Temporary Easement | 1,341 | 3,524 | 174 | 5% | 0.1 | 5,295 |
| 1.1. Entire Parcel Affected by the Project | 18 | 1,025 | 1,025 | 100% | 57 | 2,427 |
| 1.2. 20% or more of the parcel affected | 136 | 1,160 | 305 | 26% | 8.2 | 2,186 |

Source: HAPA, 2020

1. **Ownership expropriation**

Ownership expropriation: A change of ownership as a result of the expropriation work conducted by DSI for access roads, pool construction, valves and hydrant locations in the aforementioned permanently-affected parcels. As a result of expropriation, the ownership of these lands will be transferred to DSI.

In the first part of expropriation works, for **privately-owned parcels;**

* The number of parcels affected by **ownership expropriation** is 535.
* In the parcels affected by **expropriation**, the average expropriation area is 117 m2, and the average title deed size of the affected parcels corresponds to 2% of the 5,310 m2.
* The expropriation area varies between 0.1 and 2,427 m2. However, the area of influence may be larger depending on the size of superstructure facilities as a result of the activities to be carried out for all affected parcels during the second stage.

1. **Permanent easement**

Permanent easement: Restriction of the use of lands in the areas subject to permanent easement for a period of 49 years. Land users can continue to use their lands during this process but they cannot plant any rooted plant such as trees, etc. and construct any structure such as shelter and vineyard house.

The width for permanent easement will vary between 2 and 4 meters, and will apply along the pipeline. When the works in the field are complete, the land will be restored and handed over.

A photo of the land will be taken before entry into the land. Entry into the land will be completed upon the signature of a minute by DSI and the contractor.

A photo of the land will be taken while leaving the land. The land will be left by receiving the signatures of DSI, the contractor and 2 members of the village council.

In the first part of land acquisition permanent easement works, for **privately-owned parcels**;

* The number of parcels affected by **permanent easement** is 535. Almost all of the parcels (83%) are affected by permanent easement.
* In the privately-owned parcels affected by **permanent easement**, the average affected area is 75 m2, and the average title deed size of the affected parcels corresponds to 2% of the 3,493 m2.
* The permanent easement area varies between 0.1 and 1,725 m2.
* A decrease in land value may occur due to permanent easement. In the event of such circumstance, the negative impact that may occur due to “loss of value regarding permanent easement” can be eliminated.

1. **Temporary easement**

There is no permanent land acquisition under temporary easement. The width of temporary easement is 4 meters and its duration is 1-4 years. This period can be extended if needed. This is valid for access to land, ownership expropriation and the establishment of permanent easement areas regarding pipeline construction works.

When the period expires, the land will be restored and handed over if the construction work is complete.

A photo of the land will be taken before entry into the land. Entry into the land will be completed upon the signature of a minute by DSI and the contractor.

A photo of the land will be taken while leaving the land. The land will be left by receiving the signatures of DSI, the contractor and 2 members of the village council.

In the first part of land acquisition temporary easement works, for **privately-owned parcels**;

* The number of parcels affected by **temporary easement** is 779, and almost half of the private parcels (58%) are affected by temporary easement.
* In the privately-owned parcels affected by **temporary easement**, the average affected area is 111 m2, and the average title deed size of the affected parcels corresponds to 3% of the 3,744 m2.
* The temporary easement area varies between 0.1 and 3,501 m2.

1. **Temporary land acquisition, land rental**

During construction, it may be necessary to rent lands for construction sites and construction works and/or temporarily acquire lands. This impact can be observed only after the construction works are underway. When the rental period expires, the land will be restored and handed over.

1. **Duration and intensity of impact**

**Ownership expropriation and permanent easement** create a lasting effect.

In the first part of land acquisition expropriation and permanent easement works, **due to the resulting long-term impact on privately-owned parcels**,

* The number of affected parcels is 1,176. Almost all of the parcels (88%) are permanently affected.
* In the privately-owned parcels affected, the average affected area is 125 m2, and the average title deed size of the affected parcels corresponds to 3% of the 3,716 m2.
* The impact area varies between 0.3 and 3,227 m2.
* The total number of parcels affected by expropriation (100%) is 16, all of which are in **Harmanören**. This shows that the expropriation impact of the project on privately-owned parcels in Harmanören is high. The average area affected is 1,144 m².
* The number of parcels with a ratio of the affected parcel size to the title deed area between 20% and 89% is 14. 12 of these are in **Büyükgökçeli**, 1 in Harmanören and 1 in Beydere. The average area affected is 255 m².

1. **Total impact of land acquisition**

Finally,when the impact of land acquisition arising from **ownership expropriation + permanent easement + temporary easement** is analyzed for **privately-owned parcels;**

* The number of privately-owned parcels affected is 1,341. The average affected area is 174 m2, and the average title deed size of the affected parcel corresponds to 5% of 3,524 m2.
* The impact area varies between 0.1 and 5,295 m2.
* In Harmanören, all 16 parcels are affected by expropriation, 1 parcel entirely by temporary easement, and 1 parcel by expropriation + permanent easement + temporary easement.
* The number of parcels with a ratio of the affected parcel size to the title deed area between 20% and 89% is 136. 20 of these are in Beydere, 90 in Büyükgökçeli, 25 in Harmanören and 1 in Sevinçbey. The average area affected is 305 m².

### Land Acquisition Impact on Other Parcels

There are 3 disputed parcels affected in Sevinçbey. The area affected by expropriation and permanent easement is 941 m². This corresponds to 0.3% of the total parcel size and is a very small area. There are no real persons among the parties to the dispute. The court cases on the dispute are between administrative institutions (Finance and Forest Management). The users of these lands were not identified during the field study. According to the outcome of the case, compensation will be paid to the legal owner. Wood and product price will be paid to its user. Relevant measures and practices are explained in detail in Section 5.7 Entitlement Matrix.

Among other land types, for treasury, legal person, KOM and DSI lands, the total affected area average of the affected area is 5%, which is quite low. Therefore, the reduction in these lands will not adversely affect animal husbandry activities for common purposes such as grazing.

No people cultivating these lands were encountered during the field study. However, there may be PAPs in these areas who have their trees affected. Information on the affected tree assets is described in Section 3.4. Measures and practices regarding PAPs that grow crops and have trees on these lands are explained in detail in Section 5.7 Entitlement Matrix.

Table 3‑4. Size of Affected Area and Title Deed Area

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Affected Area | Treasury | Legal Entity | Common Public Property | DSI | Disputed | Total | Area/Title Deed Size % |
| Total Title Deed Area M² | 428,222 | 65,763 | 181,788 | 194,407 | 43,110 | 913,290 | 100% |
| Expropriated Area (m²) | 3,838 | 368 | 314 | 19,093 | 643 | 24,255 | 3% |
| Permanent Easement Area m² | 2,999 | 914 | 1,329 | 4,754 | 298 | 10,293 | 1% |
| Temporary Easement Area m² | 1,059 | 1,754 | 2,480 | 1,462 | 0 | 6,754 | 1% |
| Total Affected Area | 7,895 | 3,035 | 4,123 | 25,308 | 941 | 41,302 | 5% |
| Affected Area / Total Title Deed Size % | 2% | 5% | 2% | 13% | 2% | 5% |  |

Source: HAPA, 2020

### 3.2.3. Lands Qualifying as Affected Lands

**There are 120 parcels in total, including 108 privately-owned parcels which qualify as land affected by the project and are within the development area of Kuleönü town municipality as well as 10 parcels belonging to Kuleönü Municipality and 2 parcels belonging to Kuleönü Village Legal entity**. Accordingly, the residential areas allocated as zoning area constitute almost half of the total privately-owned parcels (38%). These affected parcels are zoned land. Valuation of real estates qualifying as land is explained in detail in section 6.2.

Since the final expropriation plans have not been prepared yet, the impact of the project on lands due to expropriation and permanent easement could not be determined. However, the project may have a negative impact if the planned and targeted structures cannot be established in these parcels due to the restrictions caused by expropriation and permanent easement rights. Therefore, in order to eliminate the building restrictions that will be brought by the project, it may be necessary to perform zoning modifications and to realize the planned zoning in areas not affected by the project, or to change the route, and if these are not done, it may be necessary to expropriate the entire parcels qualifying as land in order to avoid negative effects on the people affected by the project.

Table 3‑5. Zoning Status of Privately-Owned Parcels

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Zoning Status | Number of Parcels | % | Average Parcel Size M² | Minimum M² | Maximum M² |
| 1 | Area to be Afforested | 9 | 8% | 2,616 | 460 | 14,827 |
| 2 | Cami | 1 | 1% | 2,070 | 2,070 | 2,070 |
| 3 | Production Facility | 3 | 3% | 18,113 | 14,115 | 22,649 |
| 4 | Housing Area | 41 | 38 | 1,509 | 30 | 4,100 |
| 5 | Handicrafts | 8 | 7% | 1,117 | 149 | 1,980 |
| 6 | Picnicking and Recreation Area | 6 | 6% | 873 | 20 | 1,530 |
| 7 | Park | 3 | 3% | 1,387 | 980 | 1,730 |
| 8 | Recreational Area | 2 | 2% | 950 | 780 | 1,120 |
| 9 | Health Facility Area | 4 | 4% | 1,153 | 870 | 1,350 |
| 10 | Social Facility Area | 1 | 1% | 5,900 | 5,900 | 5,900 |
| 11 | Sports Facility Area | 3 | 3% | 1,369 | 616 | 2,030 |
| 12 | Agriculture and Livestock Facility Area | 27 | 24% | 2,303 | 19 | 6,725 |
|  | **Total** | 108 | **100%** | **2,268** | **19** | **22,649** |

Source: HAPA, 2020

### Land Acquisition Impact According to Survey Results

During the field study, 112 questionnaires were conducted, and information on 251 privately-owned parcels was collected. Accordingly, an average of 2.2 parcels of a PIP is affected by the project.

In addition to the affected parcels of the PAPs, information on the land assets with and without title deeds (leasing, etc.) was obtained, and the total land assets of the surveyed PAPs whose total parcel was affected by expropriation and permanent easement by 20% or more are checked on the property records provided by HAPA. The affected land assets were compared to the total land assets of the PAPs and results were thus obtained.

In the field study, as a result of the interviews with PAPs,

* 1. **Owners and/or users of private parcels**
* There are no PAPs **losing 20% or more of their total land assets** due to **expropriation, expropriation + permanent easement, expropriation + permanent easement + temporary easement.**
* The land acquisition impact ranges from 1% to 2% of the total land assets of the PAPs.

During the interviews, it was found that the affected lands had a very low impact when compared to the ratio of the lands used by the PAPs. Details are shown below.

Table 3‑6. Types of Land Acquisition and Impact

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Types of Acquisition and Impact | Number of PAPs | Total Land Assets M² | Total Affected Land M² | Ratio of Affected Area to Total Land Assets % | PIP/Average Total Land Size M² | PIP/Average Affected Area M² | Minimum Affected Area M² | Maximum Affected Area M² |
| A. Acquisition Method | | | | | | | | |
| 1. Ownership Expropriation | 76 | 2,372,637 | 15,210 | 1% | 31,219 | 200 | 1 | 2,284 |
| 2. Permanent easement | 103 | 3,321,750 | 18,989 | 1% | 32,250 | 184 | 1 | 1,027 |
| 3. Temporary Easement | 93 | 3,008,268 | 20,648 | 1% | 32,347 | 222 | 1 | 1,422 |
| B. Duration and Intensity of Impact | | | | | | | | |
| 1.Expropriation + Permanent Easement | 107 | 3,442,817 | 34,199 | 1% | 32,176 | 320 | 1 | 3,248 |
| 1.2. 20% or more of the total land assets affected by expropriation and permanent easement | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 |
| C. Total Impact | | | | | | | | |
| 1.Expropriation + Permanent Easement + Temporary Easement | 112 | 3,585,662 | 54,847 | 2% | 32,015 | 490 | 1 | 3,248 |
| 1.2. 20% or more of the total land assets affected by expropriation and permanent easement | 0 | 0 | 0 | 0% | 0 | 0 | 0 | 0 |

Source: HAPA, 2020

* 1. **Parcels other than privately-owned parcels**

During the interviews with mukhtars and the PAPs, no users were identified on the lands which belong to common public property (KOM), treasury, DSI, and legal entities and are not privately-owned parcels. However, users may arise during land acquisition practices.

### 3.2.5. Status of Households 100% of the Parcels of which is Affected by Expropriation

All 16 parcels in Harmanören are affected by expropriation. These parcels have 15 owners, and 4 of them were surveyed during the field study. It is found that each owner has some remaining land, and the land assets affected by expropriation correspond to 3% of their total lands.

Table 3‑7. Privately-Owned Parcels Entirely Affected by Expropriation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TOTAL EXPROPRIATION AREA M² | TOTAL REMAINING LAND ASSETS M² | % | AVERAGE EXPROPRIATION AREA PER HOUSEHOLD | AVERAGE REMAINING AREA PER HOUSEHOLD M² |
| 18,310 | 632,947 | 3% | 1,221 | 42,196 |

Source: HAPA, 2020

All 4 households surveyed are made up of retired persons. Their average age is 69. There are 2 households actively involved in farming. All households have other income-generating lands, except for the affected land. Their average annual gross income is TL 69,475. All households receive a retirement pension.

Considering both the size of the remaining land and the general economic conditions of households, it is expected that the project **will not** have major negative impacts on the households whose entire parcels are expropriated. On the other hand, 3 of the households interviewed reported that they had difficulty in getting along. A decrease in the income of households may make their livelihoods more difficult. By paying replacement costs, the project will prevent the loss of income that may arise from the land acquisition of these households.

## Affected Immovable Properties

There is **no** residential building affected by the project. Depending on the preparation and implementation of the project's final expropriation plans, the full list of the affected immovables will be determined.

1. **Immovable Properties Affected in Privately-Owned Parcels**

As a result of the expropriation draft map studies made by HAPA firm for Büyükgökçeli and Harmanören, immovable properties were identified in a total of 35 parcels, 17 parcels in Harmanören and 18 parcels in Büyükgökçeli.

In general, affected immovable properties are:

* Private irrigation system in 12 parcels (irrigation pipes used to draw water to the fields)
* Irrigation pools of various sizes (whose dimensions cannot exceed 4.5 m2, 5 in Büyükgökçeli, 1 in Harmanören)
* 1 greenhouse (27 m²)
* 1 privately-owned electric transformer (If the transformer can be used again, disassembly and transportation support will be provided. In other cases, the expropriation fee will be compensated.)
* Wire fencing of various lengths
* Concrete and iron poles of various lengths
* Briquette cooker
* Keystone
* and Woodshed.

As can be seen, no affected immovable assets that could cause economic and physical resettlement of the households were detected. The costs of the affected immovables of right holders will be compensated by DSI. If they wish, the debris will be left with the right holders.

1. **Immovable Properties Affected in Non-Privately-Owned Parcels**

As a result of the expropriation draft map studies made by HAPA firm for Büyükgökçeli and Harmanören, some immovables were identified by HAPA in a total of 2 parcels in Harmanören which were not privately-owned parcels. These are 1 irrigation system plus wire fence. The users of the immovables could not be identified during due diligence. However, users will be identified during RAP implementation. No real property was identified in Büyükgökçeli on lands that are not privately-owned parcels.

## Affected Trees

With the preparation and implementation of the final expropriation plans, the number and types of trees that will be affected by the project will be finalized. According to the information received from PAPs, there are households engaged in fruit growing. Therefore, households may be affected by this situation depending on the number, age and yield of affected fruit trees.

### Number and Species of Trees on Affected Privately-Owned Parcels

PAPs reported during the interviews that the number of trees in the affected privately-owned parcels was 33,135. Among the tree species found in these parcels, apple (63%) is the most common. However, whether all of these trees will be affected by the project will be determined after the expropriation plans are prepared. The trees that are mentioned here and are likely to be affected have an economic value as well as an impact on their livelihoods.

Table 3‑8. Number and Species of Trees in the Affected Privately-Owned Parcels of PAPs

|  |  |  |
| --- | --- | --- |
| Tree Species | Number of Trees | % |
| Apple | 20,990 | 63% |
| Peach | 4,493 | 14% |
| Plum | 3,719 | 11% |
| Apricot | 900 | 3% |
| Cherry | 700 | 2% |
| Grapevine | 633 | 2% |
| Vineyard | 430 | 1% |
| Quince | 410 | 1% |
| Almond | 308 | 1% |
| Poplar | 251 | 1% |
| Walnut | 197 | 1% |
| Sour Cherry | 57 | 0.2% |
| Pear | 47 | 0.1% |
| Total | **33,135** | **100%** |

Source: Socio-Economic Household Survey, 2020

Expropriation draft plan studies have been initiated by HAPA for Büyükgökçeli and Harmanören settlements. In these draft plans, the number of trees expected to be affected by the project was calculated as 4,105 in privately-owned parcels. The tree species that are expected to be most affected are rose, cherry, almond and other tree species.

The number of privately-owned parcels affected in these two settlements is 1007 (749 in Büyükgökçeli, 258 in Harmanören), and accordingly, the average number of affected trees per parcel is 4.

The tree species affected by the project will be appraised as specified in Section 6.10, and their legal owners will be compensated.

Table 3‑9. Number and Species of Trees Affected in Privately-Owned Parcels in Büyükgökçeli and Harmanören

|  |  |  |
| --- | --- | --- |
| Tree Species | Number of Affected Trees | % |
| Rose | 1,535 | 37% |
| Cherry | 384 | 9% |
| Almond | 327 | 8% |
| Plum | 265 | 6% |
| Walnut | 215 | 5% |
| Quince | 201 | 5% |
| Peach | 186 | 5% |
| Grapevine | 175 | 4% |
| Apple | 152 | 4% |
| Poplar | 152 | 4% |
| Miscellaneous (Willow, acacia, silverberry, etc.) | 151 | 4% |
| Apricot | 131 | 3% |
| Pear | 65 | 2% |
| Sour Cherry | 59 | 1% |
| Mulberry | 57 | 1% |
| Plum | 50 | 1% |
| Total | **4,105** | **100%** |

Source: HAPA, 2020

### Number and Species of Trees on Other Affected Parcels

In the expropriation plan prepared by Hapa for Büyükgökçeli and Harmanören settlements, the total number of trees detected in 60 parcels which are not privately-owned parcels (DSI 55, treasury 1, Provincial Special Administration 1, common public property 3) is 102. The identified tree species were 45 almonds, 21 poplars, 13 apricots, and 6 pines. 17 trees belong to different species. As can be seen, the number of affected trees is quite low in lands that are not privately-owned parcels.

Tree fees will be paid to those who prove that they are users.

Table 3‑10. Number and Species of Trees Affected in Other Types of Parcels in Büyükgökçeli and Harmanören

|  |  |  |
| --- | --- | --- |
| Tree Species | Number | % |
| Almond | 45 | 44% |
| Poplar | 21 | 21% |
| Apricot | 13 | 13% |
| Pine | 6 | 6% |
| Other (Walnut, plum, silverberry, etc.) | 17 | 17% |
| Total | **102** | **100%** |

Source: HAPA, 2020

### Impact of Acquisition of Orchards, the Entire Parcel of which is Affected by Expropriation

The entire parcel of 15 people in 16 parcels in Harmanören is affected by ownership expropriation. There are fruit trees in all but one of these parcels. Two parcels of one person are affected.

The number of fruit trees identified by HAPA in these parcels is 649, among which plum, almond, vine, quince, pear, apricot and walnut are among the income-generating tree species.

Affecting fruit trees may in turn affect the income earned by households from fruit growing. For example, a total of 200 plum trees of various ages in 2 households will be affected by the project. Average net income for plum trees between the ages of 6-21, as calculated by HAPA, is TL 52 per tree. In this case, the loss of two households due to the effects on plum trees is estimated to be as high as TL 10,000 per year, and approximately TL 5,000 per household on average. If the income earned by the households from other lands is less or close to the affected lands, the households may be adversely affected. However, during the desktop and field study, the average amount of affected land of the households whose entire parcel was affected by expropriation was determined to be 1,221 m² and the remaining land was determined to be 42,196 m² on average, so no significantly-affected households were identified. In addition, the negative impacts will be reduced by compensating PAPs for their income losses that will arise from the losses of the fruit trees.

How to make the valuation of the cost of the tree is explained in Section 6.

Table 3‑11. Number and Species of Trees on Entirely-Affected Parcels

|  |  |  |  |
| --- | --- | --- | --- |
| Species of Affected Trees | Number of Trees | Number of households | Household/Tree Average |
| Plum | 200 | 2 | 100 |
| Almond | 143 | 11 | 13 |
| Grapevine | 117 | 8 | 15 |
| Quince | 55 | 8 | 7 |
| Pear | 35 | 7 | 5 |
| Apricot | 35 | 7 | 5 |
| Walnut | 34 | 7 | 5 |
| Mulberry | 9 | 5 | 2 |
| Pine | 8 | 4 | 2 |
| Apple | 7 | 1 | 7 |
| Cherry | 2 | 2 | 1 |
| Blackberry | 1 | 1 | 1 |
| Silverberry | 1 | 1 | 1 |
| Poplar | 1 | 1 | 1 |
| Olive | 1 | 1 | 1 |
| Total | **649** | **66** | **10** |

Source: HAPA, 2020

## Notifications from Stakeholders

Within the scope of the field study, interviews were held with 16 mukhtars, 112 PAPs, 4 municipalities, 3 agricultural and forestry district directorates and 4 agriculture chambers, and their opinions and evaluations on the possible positive and negative impacts of the project were obtained.

### Mukhtars of the Project-Impacted Settlements

All of the mukhtars agree that the project will have positive effects. The positive effects indicated were respectively increased income and productivity, prevention of water waste, reduction of irrigation and crop farming costs, access to water and increased irrigated land, and improvement of irrigation services.

Table 3‑12. Benefits of the Project According to Mukhtars

|  |  |  |
| --- | --- | --- |
| The Greatest Benefit of the Project | Number of Responding Mukhtars | % |
| Increased income and yield | 15 | 38% |
| Preventing water waste | 12 | 30% |
| Reduced costs | 5 | 13% |
| Access to water, increase in irrigated areas | 4 | 10% |
| Improving irrigation services | 4 | 10% |
| Total | 40 | 100% |

Source: Mukhtar Interview Form, 2020

Mukhtars unanimously (100%) agree that the project **will not have any negative impacts**. 1 mukhtar (Bayat) stated that the coverage of the project was insufficient.

### Interviewed PAPs

79% of the PAPs interviewed think that **the project will make positive impacts**. The rate of PAPs who think there will only be negative impacts is 5%.

Table 3‑13. Approaches of PAPs Towards the Project

|  |  |  |
| --- | --- | --- |
| **Approach Towards the Project** | **Number of Responding PAPs** | **%** |
| **Positive** | 89 | 79% |
| **Negative** | 5 | 4% |
| **Both Positive and Negative** | 8 | 7% |
| **No Idea** | 10 | 9% |
| TOTAL | **112** | **100%** |

Source: Socio-Economic Household Survey, 2020

According to PAPs, the biggest benefit of the project will be the prevention of water waste, a facilitated access to water, a water supply at the desired level, and reduced costs.

Table 3‑14. Benefits of the Project According to PAPs

|  |  |  |
| --- | --- | --- |
| Benefits of the Project According to PAPs | Number of Responding PAPs | % |
| Preventing water waste | 82 | 63% |
| Access to water, increase in irrigated areas, sufficient irrigation water | 23 | 18% |
| Reduced costs | 10 | 8% |
| Improving irrigation services | 6 | 5% |
| Irrigation on time | 9 | 7% |
| Total | 130 | 100% |

Source: Socio-Economic Household Survey, 2020

**83% of the PAPs think that the project will not have a negative impact**. 15% stated that irrigation costs and tariffs may increase during the construction period, while 4% stated that their lands could be damaged due to construction activities.

Table 3‑15. Potential Negative Impacts of the Project According to PAPs

|  |  |  |
| --- | --- | --- |
| Potential Negative Impacts of the Project According to PAPs | Number of Responding PAPs | % |
| No negative aspect. | 93 | 83% |
| Increased irrigation tariffs and costs | 15 | 13% |
| Damage to land and fruit trees | 4 | 4% |
| TOTAL | **112** | 100% |

Source: Socio-Economic Household Survey, 2020

### 3.5.3. Corporate Stakeholders

All of the corporate stakeholders interviewed (4 municipalities, 3 agriculture and forestry district directorates, and 4 agriculture chambers) agreed that the project will have positive effects.

However, they stated that as the points to be taken into consideration during the construction period, water supply should be continued by the WUA in this period, and water users should be informed about irrigated farming techniques, irrigation technologies (drip, etc.) and the crop pattern suitable for irrigated agriculture.

All of the stakeholders interviewed stated that they can provide all kinds of institutional support regarding the project and that they are open to cooperation, and the realization of this project is very important for the farmers.

## Impacts of the Project and Proposed Measures

Potential impacts of the project on the livelihoods of PAPs are shown below;

1. **Impacts on Agricultural Production**

Land acquisition associated with the project is not expected to have any significant negative impact on agricultural activities. Because, in order to reduce the acquisition of privately-owned parcels, the project route was drawn following the existing line as much as possible, the lands that are not privately-owned parcels were usually preferred, and the number of privately-owned parcels and the area size to be affected by expropriation was minimized by consolidation as much as possible.

It is predicted that the impact of land acquisition on privately-owned parcels will be low because, per parcel;

* The average area affected by expropriation is 117 m². The average area affected by the permanent easement is 75 m². The area affected by expropriation + permanent easement is 125 m². The average area affected by expropriation + permanent easement + temporary easement is 174 m².
* The average title deed size of the affected privately-owned parcels is 3,524 m², and the ratio of the affected areas to the total title deed size varies between 2% and 5%.
* Households also have other lands they cultivate, apart from the affected parcels. The average size of the lands where the most common activity of fruit growing is performed is approximately 18 decares, and the average size of the agricultural fields is approximately 43 decares.

Within the scope of this study, a total of 14 parcels with the ratio of the affected parcel size to the land title area being between 20% and 89% were identified in 5 settlements. However, the remaining land amount of the owners of these parcels was learned, and it is determined that the permanent effect is less than 20% of the total land amount.

The entire parcel of 15 people in 16 parcels in Harmanören is affected by ownership expropriation. There are no fruit trees in one of these parcels. Two parcels of one person are affected. The number of fruit trees identified by HAPA is 649, among which plum, almond, vine, quince, pear, apricot and walnut are among the income-generating tree species. Considering the amount of land left in these households, it was determined that the affected land assets constitute 3% of the total land assets. In the survey conducted with 4 households, it was determined that the affected lands do not constitute the main income source of the households.

Agriculture and fruit growing are among the primary livelihoods of the interviewed households. During the interviews made with the households, it was observed that they wanted to get information about the positive and possible negative impacts of the project during the construction and operation period.

**Main measures** proposed to minimize the negative impact of the project on agricultural production during the construction period are:

1. **According to the project's External Stakeholder Engagement Plan**, continuous consultations to be made before and during construction will contribute to mitigating the impacts on the items listed below. Before any of these issues is conveyed to the grievance mechanism, opinions and suggestions of the public regarding these issues will be received at necessary intervals and times, and necessary information will be provided.
2. **Determination of the socio-economic status of the PAPs whose parcel is affected by expropriation and permanent easement by 20% and more:** The remaining land assets and livelihoods will be determined by interviewing the PAPs whose parcel is affected by expropriation and permanent easement by 20% and more. In the remaining 10 settlements where land acquisition will be made, the socio-economic status of the PAPs will be determined by the DSI officials, based on the affected parcel sizes. PAPs who are likely to have a negative impact on their livelihoods will be informed about income-generating agriculture and animal husbandry programs provided by public institutions, and support will be given to apply for these programs.
3. **Regular water supply:** **Water supply** during the construction period is among the most important issues for growers to sustain their agricultural activities, particularly fruit growing. They stated that their crops were currently damaged because they could not supply water from the WUA in a timely manner and at the desired quantity. It is held that some households have switched from fruit and vegetable growing to animal husbandry due to insufficient irrigation and high costs. Therefore**, irrigation services must be offered by the WUA**, growers must be able to continue their irrigated agricultural activities and water must be supplied in a way that the crops will not be damaged during the construction period. Irrigation-related complaints will be followed and resolved during the construction period. A construction timeline will be created with the contractor in a way not to disrupt the irrigation service.
4. **Considering field integrity and field usage in determining the pipeline location and valve locations:** Where the pipeline will pass through the field and the locations of valves are also important considerations. If a land is divided because the pipeline and valves will be located in the middle of the field, it is likely that not only the land within the construction work corridor, but also the entire parcel will become unusable. In this case, it may be necessary to compensate the lost crop fee not only for the affected area, but also for the entire parcel through the grievance mechanism. It is important to provide access to valve locations during the construction and operation period. If valve stations are located in a privately-owned parcel, it is possible that water users will damage the privately-owned parcel and cultivated crops while supplying water from here. In such cases, it is necessary to compensate for potential losses through the project's grievance mechanism. In determining valve locations during the construction phase, revisions will be made to adapt to the existing roads by taking these situations into consideration. If the valves end up in the middle of a parcel, they will be moved towards the borders of the parcel insofar as circumstances allow.
5. **Use of the existing canalette areas for agriculture:** Currently, open canals pass through some privately-owned parcels. Agricultural producers will be positively affected if these canals are removed and these areas are used for agricultural activities. Obligations within the contract signed with the contractor include the removal of the existing canalettes.
6. **Improving communication with the WUA:** There are mukhtars, water users and WUA members who are not satisfied with the services of the WUA as the existing WUA network is old and insufficient, and the irrigation efficiency is low. Only 4 of the 16 people interviewed stated that they were generally satisfied with WUA services (3 out of 5). The vast majority of the interviewed WUA member PAPs consider the WUA's services insufficient and view the subscription fee as high. It is expected that the complaints of WUA members and water users regarding the irrigation service will be largely eliminated and their communication with the WUA will get more positive during the operation period. The project will work on IFSIF and the WUA will hold training events for the effective use of the new irrigation system.
7. **Reducing the pressure on underground wells and water resources:** In the region, there are households that make use of underground irrigation by their own means because they do not get enough water from the WUA. There is no official data on the number of groundwater users and the number of wells, but 8 settlement mukhtars stated that there are households doing well water irrigation except for the irrigation canal. The pressure on groundwater resources will be reduced by supplying water at the desired quantity and time.
8. **Failure to cultivate the remaining agricultural land because of construction**: As a result of the division of the agricultural land due to construction, small lands may arise that remain on one side and cannot be cultivated for economic reasons or due to construction. In the event of income losses to be incurred for this reason, the losses will be compensated upon the application of the respective rights holders.
9. **Impacts on Lands Qualifying as Affected Lands**

There are 108 privately-owned parcels within the development area of Kuleönü town municipality. In the zoning plan, 41 of these parcels were processed as residential areas and 27 as agricultural production facility areas. The impacts related to these parcels and the measures to be taken will be evaluated by the DSI Regional Directorate within the scope of the second stage expropriation plan studies. As a result of the evaluation, the actions to be taken by the DSI Regional Directorate regarding this issue: i) Application to Kuleönü Municipality for an amendment to the zoning plan, or ii) the expropriation of the lands subject to the project as a whole. The matter will be clarified in the future. The project will have a severe negative impact if the planned and targeted structures cannot be established in these parcels due to the restrictions caused by expropriation and permanent easement rights. Therefore, in order to eliminate the building restrictions that will be brought by the project, zoning modifications will be made, and the planned zoning in areas not affected by the project will be delivered, or the route will be changed. If these cannot be done, the entire parcel will be expropriated as a last resort.

1. **Impacts on Livestock Production**

The project is not expected to have any adverse impact on the livestock activities. Because the ratio of grazing lands affected by the project, which are common public property, is around 2%. Furthermore, there was no concern raised by the interviewed PAPs about negative effects on animal husbandry activities. As a matter of fact, there is no report on whether animal husbandry/animals will be harmed or not, among the matters on which information is most sought after.

Although it is not expected that animal husbandry activities will be affected negatively, measures will be taken against possible adverse effects. Measures intended for the construction period:

1. **Access to grazing areas:** It is possible that animals' access to grazing areas will be restricted due to construction works. Therefore, passageways must be left for animals related to this issue.
2. **Animal health:** It must be ensured that the Main Contractor will take necessary measures in order to prevent any harm to animal health from potential negative impacts associated with construction such as dust, pits and vehicle traffic.
3. **Environmental Impacts**

During the construction period, all PAPs may be adversely affected by the potential environmental negative impacts of the project. Examples of these impacts are traffic, dust, noise, etc. An ESMP has been created with regard to these impacts. Potential impacts, the measures to be taken and monitoring studies are defined in this ESMP. Environmental impacts of the project will be evaluated within the scope of the ESMP.

**Impacts on Vulnerable Groups**

1. **Female Water Users**

According to the WUA data, the number of female water users is 963. The average size of the parcels where WUA users do irrigation is 3.2 decares, and the crops most commonly grown by water users in the community are fruits (41%), forage crops (13%) and sugar beets (11%).

Through transition to the closed irrigation system, the crop patterns of female water users may change. In this regard, it is important to **organize training on irrigated agriculture for female water users**.

1. **Land Users and Tenants of Common Areas**

As a result of interviews with mukhtars and households, no unauthorized users using the public land were detected in the affected settlements in Phase I, and no landless PAPs were encountered during the interviews. The number of the surveyed PAPs using lands (privately-owned lands, treasury lands) in addition to their own lands is 19 with a rate of approximately 17%. Among the PAPs surveyed, the number of households using the non-affected treasury land for agricultural purposes is 2, and the total treasury land they use is 27 decares. However, in the interviews with the PAPs, the users of the parcels that are not owned by affected persons were not identified.

However, during the construction period, crops, immovable properties and tree assets over the lands used and/or rented by these persons may be damaged. Damages related to products, trees and immovables will be compensated for within the scope of the project following the determination of possession and ownership by DSI. In order to be compensated for the areas affected within the treasury lands or the lands owned by third-party institutions, a title deed must be issued for the relevant lands.

Information meetings will be held by DSI in the settlements for the determination of ownership. The process will proceed based on the consultations with citizens. Ownership will be determined with the support of DSI, and relevant compensation will be paid.

1. **Owners and Users of Disputed Parcels**

There are 3 disputed parcels in Sevinçbey. The total size in the title deeds of these parcels is 43,110 m². The size of the permanently affected area is 941 m², and the ratio of the total affected area is 2%. The expropriation and permanent easement fee for the parcel will be given to the legal owner to be determined as a result of the lawsuit. If there are crops and trees on the land, their cost will be given to the land user.

1. **Seasonal Workers**

Mukhtars report that seasonal workers are hired in all settlements. Their number varies between 10 (Küçükgökçeli) and 1500 (Harmanören). Seasonal workers come mostly during the harvest season (between June and September). The vast majority of settlements supply seasonal workers from neighboring villages, neighborhoods, districts and regions. However, 2 settlements (Büyükgökçeli and İslamköy) reported that they also supplied seasonal workers from the Southeastern region.

If water is supplied to water users during the construction period, no major changes are expected in the existing crop pattern. If the crop pattern does not change, no change is expected in the number of seasonal workers.

Through transition to the closed and piped drip-irrigation system during the operation period, changes may occur regarding the crop pattern and, accordingly, the number of seasonal workers.

As water will be supplied during the construction period, no impact is expected regarding the crop pattern and irrigated area. Therefore, no change is expected in the number of seasonal workers. In this regard, information meetings will be held for the farmers hiring seasonal workers as well as the seasonal workers working in the region during the construction phase.

1. **Vulnerable Groups in Need**

There are vulnerable groups in need in the project's area of influence. If the livelihoods of this group are adversely affected due to the project, the impact will be significantly high. There are various support mechanisms for the vulnerable groups in this group under SYDV and İş-Kur supports. It is important to inform these groups so that they can benefit from these supports. Consultations to be made with vulnerable groups are detailed in Section 7.4.

However, the number of PAPs willing to benefit from local employment is very low. During the interviews made with PAPs, 14% of them stated that there were household members who were available for employment during the construction phase of the project. It is important to make announcements in the region with regard to the employment activities to be carried out by the contractor and to supply the workforce, especially the unskilled workforce, from local communities and the region and especially the PAPs in the vulnerable group. Necessary activities will be carried out with the contractor regarding this issue.

Table 3‑16. PAPs' Local Employment Demand

|  |  |  |
| --- | --- | --- |
| Households Eligible for Employment During Construction | Number of Responding PAPs | % |
| Yes | 16 | 14% |
| No | 96 | 86% |
| TOTAL | **112** | **100** |

Source: Socio-Economic Household Survey, 2020

# Legal Framework

This section deals with national legislation and regulations as well as international standards and requirements for the Project's land acquisition and land consolidation practices.

## National Legislation

### Applicable National Legislation on Land Acquisition

National legislation for land acquisition in Turkey is governed through several regulations among which are, but not limited to, the Turkish Constitution, Land Registry Law, Cadastral Law, Expropriation Law and the Settlement Law.

Article 46 of the Constitution of the Republic of Turkey provides that, when the public interest requires so, the State and public entities are entitled to completely or partly expropriate real estate under private ownership and establish administrative easement on them on the condition that their real value is paid in advance and in accordance with the principles and procedures set forth by law. While expropriation is compulsory, expropriation fee must be paid prior to land entry by law. Moreover, the owner and occupant of the immovable property subject to expropriation and other concerned parties may file actions against the expropriation procedure or appraised values and errors of fact before judicial courts.

Having entered into force on May 18, 2012 and amended by the Law No. 6302, the Land Registry Law No. 2644 is the main land title regulation. Land registration in Turkey is based on the Cadastre Law No. 3402. The Cadastre Law also defines the process for the identification of landowners with no registered title deed or in cases where there is confusion over land ownership.

DSI primarily makes use of the land consolidation method for the acquisition of the lands required for the proposed irrigation projects. Land consolidation is the preferred method as it offers many benefits to landowners. Land consolidation is an approach that generally minimizes field loss, decreases labor costs and increases land value depending on the field inputs and crop pattern while boosting crop productivity and income. The lands to be acquired through consolidation are beyond the scope of the RAP.

However, in cases where it is impossible to acquire lands through land consolidation or lands are not technically suitable for land consolidation, the relevant lands are acquired through expropriation.

All expropriation activities carried out by DSI are performed based on the Expropriation Law No. 2942.

Expropriation legislation in Turkey does not require the compensation of the tenants, croppers and illegal users of immovable properties who do not make any improvement concerning the respective lands (buildings and/or trees). However, payments can be made to those who prove their ownership through legal documents or courts. On the other hand, in the expropriation of lands that are registered in the name of another person, are abandoned and/or are not acquired by their respective possessors, the minimum supply cost of the buildings is paid to their possessors while the price of trees appraised within the framework of Article 11 of the Law is paid to their possessors.

If it is determined that an immovable property not registered in the title deed registry, and decided to be expropriated as per Article 19 of the Expropriation Law is not one of the public properties listed in Article of the Cadastre Law No. 3402, a possessor is present for the immovable property and a claim of possession is filed, then an on-site examination is conducted through the experts chosen as per Article 9 for the collection of evidence and a minute is drafted. All documents which are prepared and collected by the administration as per Article 10 shall be submitted to the civil court of first instance and the court shall be asked to determine the expropriation price of the immovable property and to decide on the registry thereof in the name of the administration in return for the payment of this price. The court sets the expropriation value of the immovable property in line with the procedure and time period stipulated in Article 10.

If the immovable properties required for the project belong to public institutions, the following methods are utilized for the acquisition of these immovable properties:

* Transfer as per Article 30 of the Expropriation Law,
* Exchange as per Article 26 of the Expropriation Law,
* Free transfer as per Article 45 of Law No. 5018,
* Allocation as per Article 47 of Law No. 5018.

The method to be administered out of the aforementioned methods is identified as per the negotiations and agreements concluded with the owner institution.

### National Legislation Concerning Easement

Easement is defined as follows in Article 779 of the Turkish Civil Code:

"Easement in favor of an immovable property is a burden on one immovable property in favor of another immovable property whereby the owner of the burdened immovable property is forced to refrain from the exercise of some authorities granted by the ownership right or to tolerate the benefiting owner's use of the burdened immovable property in a certain way..."

The Expropriation Law No. 2942 provides that easement will be established within the framework of land acquisition. According to Article 4, "Instead of the ownership expropriation of an immovable property, easement may be established through expropriation over a certain section, height, depth or resource of an immovable property if it is sufficient for the intended purpose.

As for the expropriation procedures completed by way of establishing an easement, owner of the immovable property will be able to benefit from the immovable property and use the right to property insofar as the type and nature of the easement permits. The easement to be established on the immovable property can be established over a specific section, height, depth or resource of the immovable property.

It is necessary to appraise the expropriation price and easement fee based on the methods used for the expropriation of immovable goods or resources as specified in Article 11 of the Law No. 2942 amended by the Law No. 4650. As a matter of fact, the value of an immovable property will be appraised as if no easement has been established (according to the income method for lands and the market value for parcels) and then, the easement fee will be calculated as per Article 11 of the Law No. 2942.

Establishment of easement is divided into two depending on the use and need of an administration. These are vulnerable groups to be identified based on;

a) Establishment of temporary easement: Its duration is 1-10 years.

b) Establishment of permanent easement: Its duration is 11-99 years. It is generally established for 49-99 years.

If temporary easement is established, the loss of value is not calculated as if there is permanent easement over the entire immovable property. The incurred loss is calculated by considering the income or rental fee deprived during the easement.

Expropriation fee calculated for the establishment of easement cannot exceed 1/3 of the price determined for ownership expropriation for lands and ½ for parcels. Case-law of the Court of Cassation provides that the loss of value incurred in lands due to easement may not exceed 35% of the ownership value of the area affected by the easement in the absence of any special case significantly affecting the use of immovable property according to its intended purpose.

### Applicable National Legislation Concerning Land Consolidation

DSI is the main institution assigned for land consolidation in Turkey. **The Implementing Regulation No. 30679 on Land Consolidation and On-Farm Development Services** drawn up based on Additional Article-9 of the Law No. 6200 on the Services Offered by the General Directorate of State Hydraulic Works, Article 6 of the Agricultural Reform Law on Land Arrangements for Irrigation Areas No. 3083 and Article 24 of the Law No. 5403 on Soil Conservation and Land Use constitutes the legal infrastructure of land consolidation. This regulation was published and entered into force on February 7, 2019. Prior to the entry into force of this regulation, consolidation procedures were executed by the Ministry of Food, Agriculture and Livestock. As per Article 2 of the Implementing Regulation No. 30679 on Land Consolidation and On-Farm Development Services, DSI is authorized to offer land consolidation and on-farm development services as the implementing institution.

Other laws directly or indirectly related to land consolidation are:

* The Law No. 6200 on the Organization and Duties of the General Directorate of State Hydraulic Works,
* The Agricultural Reform Law on Land Arrangements for Irrigation Areas No. 3083,
* The Law No. 5403 on Soil Conservation and Land Use,
* The Law No. 6172 on Water Users Associations,
* The Agriculture Law No. 5488,
* The Cadastre Law No. 3402,
* The Municipality Law No. 5393,
* The Special Provincial Administration Law No. 5302.

## World Bank OP: 4.12

### Operational Policy No. 4.12 of the World Bank on Involuntary Resettlement

Operational Policy No. 4.12 (OP 4.12) of the World Bank on Involuntary Resettlement deals with the risks that will arise out of involuntary or compulsory Resettlement under development projects, covers measures to mitigate such risks and is relevant to all involuntary or compulsory resettlement procedures.[[10]](#footnote-10)

The overall objectives of the World Bank's policy on involuntary resettlement are the following:

Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.

Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

OP 4.12 contains certain provisions complementary to the national legislation. These provisions can be outlined as follows:

* In accordance with the applicable legislation, the compensation to be paid to the owners for a property subject to land acquisition is calculated at amount that is sufficient for the purchase of an equivalent property in the same region,
* Costs of the fixtures and renovations of legal or illegal users which are affected by expropriation and the entitlement and ownership of which can be identified are compensated,
* An effort is made to create alternative livelihoods or support facilities for the persons who lose their livelihoods or whose livelihoods are restricted as a result of land acquisition or an assistance is offered to substitute the livelihoods and living standards of these persons,
* The public is regularly informed about the project and its impacts and consultation and engagement processes are included in the entire project process,
* Monitoring, grievance and demand mechanisms are created.

OP 4.12 requires that land acquisition not be carried out without compensating the damages of affected persons.

'Replacement cost' is the methodology used for the valuation of assets covered by OP 4.12: For agricultural lands, this cost refers to an amount that is equivalent to the sum of the market price of a land that is close to the affected land, has an equivalent potential of yield or use prior to the project or displacement as well as the costs intended for restoring the conditions of the said land to those of the affected land and title deed and transfer charges and taxes."

OP 4.12 also requires efforts to be made for offering access to equivalent or acceptable levels of resources and income opportunities under the Project by considering the difficulty of monetary compensation for losses on certain matters such as access to public services, customers and suppliers.

Although OP 4.12 covers all affected persons, it also envisages special attention to vulnerable people under the Project.

## Gap Analysis and Measures for the Harmonization of the Turkish Legislation with the World Bank's OP 4.12 Operational Policy

National legislation and processes related to land acquisition in Turkey go back a long way. National legislation and processes have been updated in time to eliminate the problems encountered during the years of implementation and to meet certain requirements of international best practice examples. However, there are still some conflicts/loopholes between the Turkish legislation and OP 4.12. Deficiencies related to the Irrigation Modernization Project in Turkey are discussed in detail below. A summary of these deficiencies and the measures proposed against them are also shown in the table below.

Considering the land acquisition requirements under the Irrigation Modernization Project, there are some loopholes between the policies of the World Bank and the national legislation. These are as follows.

***Resettlement Action Planning:*** There is no mandatory legal regulation for the preparation of a Resettlement Action Plan that covers all displaced persons and host communities. Therefore, a planning is required based on Land Acquisition Plans. DSI will prepare a Land Acquisition Plan for the projects requiring land acquisition.

***Identification of Project Affected Persons Including Vulnerable Groups:*** According to the Turkish legislation, only the legal owners of lands are considered as Project Affected Persons (PAPs). Therefore, the losses of PAPs such as those not holding any title deed, the users of treasury land, host community, seasonal workers/immigrants (making use of the project area) and the persons due to other or economic reasons are not taken into account and there is no effort to eliminate the negative impacts of projects on these persons. Most of these communities are not covered by the definition of PAP in the Turkish legislation.

***Replacement Cost:*** In case of the loss of lands and other immovable properties in accordance with the Bank's policies, all replacement fees must be paid before construction begins. Although the 'land-for-land' method is an option for disposed lands, there is no area of implementation for this method in Turkey as the institution conducting expropriation within the legislation applicable in Turkey is not liable to find an alternative land that is equivalent to the land in question. Considering that a monetary payment equivalent to the replacement fee is a method of compensation, the losses of the legal owners of lands will be compensated, and tenants, public users and unauthorized users will be entitled to receive a compensation in proportion to their investment in the land in question. Although the Turkish legislation provides that only the legal owner of a land is entitled to compensation and the depreciation cost for expropriation will be deducted from this amount and prescribes that the expropriation fee will be lower than the replacement cost specified in OP 4.12, it is envisaged that a replacement cost that is sufficient to cover the compensation replacement cost calculated through the current practices will be compensated. Compensation for income losses, access to common properties or social losses are not covered by the Turkish legislation. Full replacement cost is intended for lost lands and structures. A number of remedial measures are specified in the Entitlement Matrix for PAPs that fall under the definition of OP 4.12.

***Compensation for Legal/Unauthorized Land Users:*** According to the Bank's policies, both legal and unauthorized users of a land are covered by the PAP definition. Turkish legislation does not require the compensation of the tenants and unauthorized users of lands/properties[[11]](#footnote-11). However, all affected Persons are compensated for all types of structures, buildings, trees and field crops as per the Bank's operational policy. OP 4.12 also prescribes the substitution of the losses of income/livelihoods as a result of removing persons from the lands subject to acquisition where necessary. In this context, the compensation paid must restore the livelihoods of tenants and other unauthorized users of lands to the level prior to displacement. In addition to the legal compensation paid to the official owners of lands, assistance can be extended to unauthorized users not holding any legal right from the social assistance funds affiliated to municipalities and/or district governorship.

***Restoration of Livelihoods***: Improving livelihoods and support during the transition period are not regulated in the Turkish Expropriation Law. Turkish law does not cover any special regulation for vulnerable communities or significantly affected PAPs (those losing over 20% of their lands or sources of production). Expertise and resources are needed for livelihood restoration support, transition support and alternative income support. DSI will cooperate with other institutions/organizations at provincial level to restore livelihoods as much as possible.

***Public Information, Engagement and Consultation Process:*** Provisions in the Turkish legislation are limited as regards public information, engagement and consultation processes. According to the law, the institution carrying out the expropriation process is liable to notify PAPs of the decision of expropriation. Negotiation and asset valuation consultation processes are also carried out by the institution carrying out the expropriation. The law does not include any other consultation process. However, OP 4.12 requires a fully-fledged public sharing process for RAPF and project-based RAP. RAP of the project will be announced to the public on the official website of DSI and information will be offered in public places accessible to all PAPs including vulnerable communities. During expropriation and land consolidation processes, DSI ensures the continuity of the consultation process through its own staff and Water Users Associations. DSI informs other stakeholders including those who have invested in the treasury land or used the land without any legal right to do so and tenants as well as tenants in addition to legal rights holders via official correspondence and consultation as in the case of the owners of lands and properties. The said letter provides information on the impacts associated with sub-projects and the need for lands.

***Notification of Complaints:*** Although provisions regarding the notification of complaints are covered by various pieces of legislation such as the Expropriation Law No. 2942, the Law No. 3017 on the Exercise of the Right to Petition and the Law No. 4982 on the Right to Information, these provisions prescribe relatively official and legal mechanisms. Currently, a four-stage Grievance Notification Mechanism is implemented within DSI. This mechanism is designed to collect project-specific grievance notifications. These project-based grievance notification mechanisms are complementary to official and legal mechanisms suitable for use by PAPs.

***Monitoring and Evaluation:*** There is no specific practice for monitoring and evaluating land acquisitions performed through expropriation. DSI will carry out monitoring activities at regular intervals, which will be determined based on the size and impact of the project, by way of creating key performance indicators regarding monitoring.

Table 4‑1. Gap Analysis and Measures to Eliminate Differences

| No | Gap/Deficiency | Legislation in Turkey | World Bank Policy Requirements | Measures to Eliminate Deficiencies |
| --- | --- | --- | --- | --- |
| 1 | **Resettlement action planning** | There is no legal regulation for the preparation of a Resettlement Action Plan that covers all displaced persons and host communities. | The World Bank's policy requires the preparation of a Resettlement Action Plan. | Although the Project's activities do not require any physical resettlement, an economic displacement is expected in some irrigation projects due to partial expropriation (mostly due to easement). In this respect, a project-specific RAP was prepared by DSI. |
| 2 | **Valuation Method** | The legislation in force does not require that the institution conducting the expropriation process will conduct any research on alternative lands of equivalent value for disposed lands. In other words, the 'land-for-land' method is not implemented in Turkey.  Compensation for buildings is offered over construction cost and depreciation is deducted. Construction cost is calculated over the approximate unit prices of the building. Lands with the quality of a parcel are compensated over the market value.  Incurred title deed and transaction costs are not covered. | The loss of lands, other similar fixed assets and immovable properties must be compensated over the pre-construction full replacement cost. The 'land-for-land' method is another option for disposed lands.  No deduction is made regarding depreciation.  Title deed and transaction costs of PAPs must also be covered. | Disposed lands and buildings will be compensated in a way to acquire an equivalent immovable property.  Loss of value regarding immovable properties/lands due to permanent easement will be compensated.  Crop prices on the lands will be added to the expropriation price.  Valuation activities to be carried out for expropriation purposes will be conducted in accordance with the law and legislation and it will be demonstrated that the resulting amount includes the costs of title deed transactions. The expropriation price will be determined in a way to cover the replacement cost.  Legal expenses incurred as a result of the agreements concluded with regard to expropriation procedures as per Article 8 of the Expropriation Law will be covered by DSI. |
| 3 | **Restoration of Livelihoods** | There is no provision in the Expropriation Law regarding the livelihood restoration and any assistance to be extended during the transition period. | If less than 20% of PAPs' lands are affected, a cash compensation is offered over their values in a way to cover the full replacement cost. If this level is 20% and higher, it is required to help displaced persons with their efforts to improve their former living standards, capacity of income generation and levels of production or, at least, restore them to their pre-Project levels. | It is expected that impacts on livelihoods will be positive rather than negative.  As a result of the first section expropriation work and field studies, there is no PAP losing 20% of their total land assets and more. Therefore, cash compensation will be utilized. In addition, cooperation programs will be organized with the relevant public institutions in order to improve the livelihoods of PAPs.  If it is detected that the livelihoods are adversely affected:  Mitigation measures will be taken within the scope of the project. Expertise and resources are needed for livelihood restoration support, transition support and alternative income-generation support. DSI will restore livelihoods as much as possible in line with the alternatives proposed in the Entitlement Matrix in cooperation with other public institutions at provincial level.  Land entry will not be proceeded before expropriation fees are paid.  Land Entry and Exit Protocols will be prepared during entrance to and exit from the land.  The land in question will be made ready for use before it is handed over to its respective owner.  Activities will be organized and training events will be held by the Ministry of Agriculture and Forestry in order to raise awareness of growers and water users on subjects such as the selection of appropriate irrigation methods, the planning of irrigation time, the correct implementation of crop rotation, water saving, modern irrigation methods, the reduction of water losses, water harvesting and plant pattern. |
| 4 | **Losses of occupant and unauthorized users including vulnerable communities.** | As per the legislation, PAPs are legal owners with land loss. Seasonal workers/immigrants or economically displaced persons do not fall under the definition of PIP. By law, the structures and crops of both legal owners and unauthorized users in the treasury lands are compensated. However, there is no compensation provision for unauthorized users on pasture lands and forestry lands.  According to the amendment made in Article 19 of the Expropriation Law, compensation is paid to the persons spending money and constructing buildings or other structures on the lands of other persons over the full replacement cost for trees and over the costs of materials for buildings.  The expropriation value of the parcels in the defendant status is paid to the right owner to be determined as a result of the lawsuit, at the rates determined by the court. | Economically displaced persons, seasonal workers and other vulnerable communities must also be considered as PAPs. Regardless of their ownership status, all PAPs will be compensated for the losses they suffer. | Regardless of their ownership status, all PAPs will be identified within the framework of the project-specific Land Acquisition Plans (RAPs) and measures will be taken for compensating all land users.  One or more of the following measures will be implemented by DSI in restoring livelihoods for all Affected Persons with the status of an unauthorized user.  It will be ensured that land users who have the right of possession will receive the title deed of the land in question.  A monetary compensation will be paid in a way to cover the replacement cost of affected crops and immovable properties if unauthorized users prove their right of possession as per Article 19 of the Expropriation Law,  DSI will inform the relevant persons to make use of the available funds by applying to the district governorships, the Public Work Programs of İŞKUR or the relevant Social Assistance and Solidarity Funds.  DSI will ensure that contractors prioritize unauthorized users within the scope of job/employment opportunities regarding the project.  According to the expropriation law, the price of the real estate is determined by the court and the land is only entered after compensation is blocked in the bank. The owner of the defendant parcels will be determined by the relevant court and the expropriation value will be paid to the owner determined by the court. |
| 5 | **Consultation and Disclosure of Information** | Turkish legislation regarding land acquisition contains limited provisions regarding the public disclosure, the reception of public opinions and its engagement.  The organization that carries out the expropriation process is obliged by law to inform PAPs of this expropriation decision.  The organization carrying out the expropriation process also conducts negotiations and consultations and appraises assets.  Since there is no obligation to prepare a Stakeholder Engagement Plan, no further consultation is required by law. | As per OP 4.12:  •A project-specific RAP is fully disclosed to the public.  •All stakeholders are provided with equal opportunities to access Project documents and to comment on these documents, and consultation meetings are held in a place accessible by anyone wishing to attend.  •Consultations are also held with vulnerable groups. | RAP of the project will be announced to the public on the website of DSI and information will be offered in public places accessible to all Affected Persons including vulnerable communities. DSI will prepare an information brochure for land acquisition and expropriation payments and inform the PAPs. During expropriation processes, DSI will ensure the continuity of the consultation process through its own staff and the Water Users Association. DSI will inform other stakeholders including those who have invested in the treasury land or used the land without any legal right to do so and tenants as well as tenants in addition to legal rights holders via official correspondence and consultation as in the case of the owners of lands and properties. Information will be providing on the impacts associated with the relevant sub-projects and the need for lands.  The RAP contains information on how DSI will engage stakeholders for the project. (For further information, see RAP, Section 7: Consultation and Engagement) |
| 6 | **Cut-off date** | Turkish law requires the preparation of an assets inventory Land acquisition through expropriation requires the preparation of a full count of project-impacted immovable assets and a list of their owners. An asset inventory is prepared only for legal rights holders. There is no obligation to inform PAPs about the completed asset inventory and the cut-off date. | A full count is performed for the identification of PAPs, affected lands, crops and immovable properties and the identification of rights holders. | A full count will be performed by DSI regarding PAPs and immovable properties.  The RAP was prepared from a selected sample for the identification of rights holders.  Information will be provided on the cut-off while announcing the RAP.  A cut-off date will be in place for the identification of rights holders. Cut-off date is defined as the date of completion of the count of PAPs and assets inventory of immovable properties. People who settle in the project area after the cut-off date cannot benefit from the compensation support. Fixed assets (such as built structures, crops, fruit trees, and woodlots) established after the date of completion of the assets inventory, or an alternative mutually agreed on date, will not be compensated. |
| 7 | **Grievance Mechanism** | A national grievance mechanism has been introduced for the use of all Affected Persons. | A project-specific grievance notification mechanism is required. | Currently, a four-stage Grievance Mechanism is implemented within DSI (For more details, see RAP, Section 8: Grievance Mechanism). This mechanism will be developed taking into account the collection of project-specific objections and complaints. Although such grievance notification mechanisms are support components at Project-level, they cannot replace the legal mechanisms that are available for Affected Persons.  PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.  The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated. |
| 8 | **Monitoring and evaluation** | There is no monitoring and evaluation practice regarding land acquisition under Turkish law. | Arrangements for monitoring, implementation and the evaluation of the impacts of RAPs must be prepared in accordance with the World Bank policy requirements. | RAP will be monitored and evaluated.  Key performance indicators will be set by DSI for monitoring and internal and external monitoring activities will be performed at regular intervals (For more details, see RAP, Section 9: Monitoring and Evaluation). |

In case of any conflict between national legislation/regulations and OP 4.12, this RAP harmonized with OP 4.12 will be valid within the scope of this project.

# Implementation, Compensation and Other Supports

## Land Acquisition Process

Land acquisition process will be carried out by DSI according to the Expropriation Law No. 2942. Accordingly, expropriation plans are prepared, the owners and possessors of immovable properties are identified, an expropriation decision is issued and notified to the Land Registry Directorate and an administrative annotation is affixed as per Article 7 of the Law. Estimated value of the immovable property is appraised by using scientific and objective data within the scope of Article 11 of the Law. First of all, land acquisition will be made through willing buyer - willing seller arrangements as per Article 8 of the Expropriation Law.

A memorandum of understanding is prepared in the event that an agreement is reached with the owners of immovable properties regarding the appraised value as the expropriation process starts with acquisitions and this memorandum constitutes the legal basis of the ex-officio registration of such immovable properties in the name of our administration (Article 8 of the Law).

If no agreement is reached with the owner of an immovable property, the expropriation price is set by the court as per Article 10 of the Law and paid to the owner thereof and the immovable property is registered in the name of the administration.

If the immovable property of another Public Entity is required, the provision stipulated in Article 30 of the Law applies. If no agreement can be reached with the administration that is the owner of the immovable property, this issue is finalized by the Court.

Figure 5‑1. Expropriation Process



Figure 5‑2. Reconciliation, Litigation and Payment Process

## Identification of Rights Holders

Rights holders affected by the Project's land acquisition activities through ownership expropriation, permanent and temporary easement are;

* Landowners with a title deed and land users
* In case the defendant parcels are private persons amongst the disputed parties (the cost of the expropriated immovable is determined by the court and blocked in the bank. The owner is paid after the ownership case is concluded)
* Land users whose rights can be legalized (Those who have the right of possession over the land),
* Owners and users of immovable properties (including unauthorized users),
* Crop owners with a land title deed,
* Official tenants (on privately-owned and public lands),
* Crop owners without any land title deed (including unauthorized users),
* Female farmers,
* Vulnerable groups,
* Animal owners grazing their animals in project-impacted lands,
* PAPs suffering damages during the construction phase of the project.

Payments can be made to those who prove their ownership through legal documents or courts. In the expropriation of lands that are registered in the name of another person, are abandoned and/or are not acquired by their respective possessors, the minimum supply cost of the buildings is paid to their possessors while the price of trees appraised within the framework of Article 11 of the Expropriation Law will be paid to their possessors. However, these prices will be compensated in accordance with the entitlement matrix of the current RAP.

The aforementioned individuals and groups will be able to benefit from the supports listed in the entitlement matrix.

## Responsibilities of DSI for the implementation of RAP

Subjects for which DSI is responsible under RAP are summarized below.

* Performing land acquisition procedures through ownership expropriation, temporary and permanent easement,
* Conducting valuation procedures for all expropriation processes and affected assets
* Following and reporting on the land acquisition process,
* Establishing and operating a grievance mechanism related to the project and closing complaints and demands within 30 days,
* Organizing information meetings for all relevant stakeholders including vulnerable groups and holding an announcement and information meeting for RAP,
* Preparing and distributing leaflets, banners and posters that will introduce the rights defined in the RAP, eligible persons for the rights, the land acquisition process and the project-related grievance mechanism,
* Gathering the information (land users, vulnerable groups, the levels of impact, etc.) required for updating the RAP and updating it when necessary,
* Executing and reporting on the RAP monitoring and evaluation studies,
* Identifying and supervising the contractor that will execute construction activities,
* Informing the contractor about the international standards that must be complied with,
* Following the complaints to be received regarding the contractor and ensuring that any incurring loss out of its negligence is compensated by the contractor,
* Implementing and monitoring the ESMP for the construction period.

DSI units that will take part in the project implementation are shown below.

Table 5‑1. Responsibilities of DSI Units

|  |  |  |
| --- | --- | --- |
| Relevant Institution | Unit/Department | Terms of Reference |
| DSI | Department of Real Estate and Expropriation | Supplying allocations for the places where expropriation is required, approving sub-contractors and coordination with the Regional Directorate,  - Preparing and implementing the RAP  - Submitting the RAP to the WB for preliminary assessment  - Conducting the quality control and review of the RAP  - Ensuring that regular monitoring activities are performed for the implementation of RAPs  - Following and coordinating the preparation of RAP Reports.  Coordinating the following activities to be performed by the Regional Directorate;  - Executing land acquisition activities  - Attending the information meetings  - Following the land acquisition process  - Following and closing complaints about land acquisition  - Making payments to PAPs regarding expropriation and easement procedures  - Preparing expropriation plans for the project-impacted parcels other than those covered by the first section  - Setting the expropriation price as per Article 8 of the Expropriation Law and coordinating interviews with PAPs |
| DSI | Department of Operation and Maintenance | Executing the project |
| DSI | Department of Survey Planning and Allocations | Implementing, monitoring and reporting on the ESMP by ensuring coordination. |
| DSI | Department of Project and Construction | - Publishing the RAP on DSI's official website  - Summarizing the environmental and social issues related to the project implementation to the WB via regular progress reports  - Coordinating the WB inspections on the environmental and social protection policies of the project implementation and establishing contact in this regard  Preparation of the modernization project.  Informing the Department of Real Estate and Expropriation concerning the expropriation of the areas required based on the prepared projects or the acquisition thereof for land consolidation. |
| DSI | 18th Regional Directorate of Isparta | - Implementing and following the RAP  - Executing land acquisition activities,  - Attending the information meetings,  - Following and closing complaints about land acquisition,  - Making payments to PAPs regarding expropriation and easement procedures,  - Preparing expropriation plans for the project-impacted parcels other than those covered by the first section,  - Setting the expropriation price as per Article 8 of the Expropriation Law and conducting interviews with PAPs  - Preparing the brochures and other information documents required for informing the public and the relevant stakeholders  - Appointing a Public Relations and Environment Specialist who will work in the district to manage the impacts of the project, the construction plan, the rights and entitlements of the PAPs and the grievance mechanism at local level  - Conducting inspections regarding the implementation of the RAP by the construction contractor, making recommendations and deciding whether additional measures are required or not  - Ensuring that the contractor remedies complaints and damages arising therefrom  - Operating the Grievance Mechanism  - Coordinating with local and regional stakeholders to be collaborated, developing and implementing collaborations  - Supporting DSI field staff and WUA representatives for the preparation of gender sensitivity training  - Identifying the irrigation program to be introduced during construction works together with Water Users Associations  - Ensuring that lands are restored and handed over to their respective rights holders  Implementing, monitoring and reporting on the RAP and ESMP.  - Providing up-to-date information to the Department of Real Estate and Expropriation and the Department of Operation and Maintenance about the existing irrigation systems and social structure by ensuring coordination with the relevant Water Users Association. |
| DSI | DSI 181.th Isparta Section Directorate | - Implementing the RAP  - Holding public consultation meetings  - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders  - Informing the employees of the Water Users Association about the Grievance Mechanism  - Operating the Grievance Mechanism  - Drawing up land entry and exit protocols  - Identifying PAPs in the field (User, level of impact, etc.)  - Regularly informing the Water Users Association and PAPs about developments on the project  - Following the canalettes, etc. to be removed under the Project with Atabey Water Users Association |
| DSI | Atabey Water Users Association | - Informing PAPs about the project  - Creating a database regarding the Grievance Mechanism, conveying incoming complaints to DSI  - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders  - Supplying water to PAPs and making the relevant planning during the construction period and informing PAPs  - Examine the damages that may arise from the contractor on site and reporting them to DSI  - Following the canalettes to be removed under the Project |

## Studies of Other Relevant Institutions in the Region and Cooperation Opportunities

1. **West Mediterranean Development Agency (BAKA)**

The 2018-2023 Isparta Province Investment Support and Promotion Strategy prepared by BAKA includes targets for increasing the competitiveness of agricultural products in the region with innovative methods. In addition, it is aimed to brand and promote the agricultural products produced.

In parallel with the Regional Development Plan, which is the main framework prepared and the aforementioned strategy document, various grant programs are opened by BAKA every year. Eligible applicant PAPs can benefit from these grant programs. In addition, by establishing partnerships with relevant public institutions and universities by the Water Users Association, it can be ensured that PAPs benefit from these grants and supports.

1. **Provincial and District Directorates of Agriculture and Forestry**

A lot of support is provided by the Provincial and District Directorates of Agriculture for the establishment of demonstration gardens, supports to women farmers, agricultural extension and training. These directorates are important partners in order to better evaluate the production and product diversity that will increase with irrigation modernization of fruit growing and agriculture, which are prominent sources of income in the project impact area.

Isparta Provincial Directorate of Agriculture and Forestry announced in July 2020; with the publication in the Official Gazette of the "President's Decree on Agricultural-Based Economic Investments and Supporting Rural Economic Infrastructure Investments within the Scope of Rural Development Supports," that grants will be given for investments of private and legal persons, primarily women and young entrepreneurs, in order to boost agricultural labour participation, promote product diversification, improve socio-economic infrastructure investments and producers' organizations, improve agricultural-based rural economic infrastructure. These grants, which will be valid between January 1, 2021 and December 31, 2025, will be beneficial especially to women and young PAPs, and are expected to create positive effects in the impact area of ​​the Project.

Agricultural irrigation support (support of individual irrigation systems) is provided by the Ministry of Agriculture and Forestry with a 50% grant each year to eligible applicants.

Furthermore, in order to benefit from the Digital Agriculture Market (DITAP), which was launched by the Ministry in 2020, the only requirement for PAPs is to be registered in ÇKS. Provincial and District Directorates of Agriculture have the capacity to serve PAPs who want to be included in this system.

1. **Turkish Employment Agency (İŞKUR)**

Public work programs and entrepreneurship training events are offered by Isparta İŞKUR Directorate. It is possible to contribute to the support of interested PAPs by informing them about İŞKUR programs.

In addition, it is possible that unemployed PAPs, especially those in the vulnerable group, can be employed through İŞKUR.

1. **Social Assistance and Solidarity Fund (SYDV)**

SYDV provides various in-kind and cash supports for vulnerable groups. Apart from the aforementioned supports, there are "Income-Generating Project" supports offered to poor individuals or households to set up business that would bring about livelihoods for them and to sustain such businesses for a long time. These supports have an upper limit of TRY 15,000 for individual projects subject to a long-term repayment plan, TRY 50,000 for sheep breeding and TRY 150,000 for dairy cattle breeding in group projects.

PAPs that meet the criteria required by SYDV for application and are covered by vulnerable groups can benefit from SYDV supports.

1. **Western Mediterranean Agricultural Research Institute (BATEM)**

The Directorate of Western Mediterranean Agricultural Research Institute, headquartered in Antalya, operates in Antalya, Isparta, Burdur, Isparta, Denizli and Muğla in order to increase agricultural research and production, and is affiliated with the Ministry of Agriculture and Forestry.

Many studies are carried out by BATEM especially in the fields of irrigation, seed improvement, fertilization, product registration and certification, demonstration and training. For example, in the first 6 months of 2020, demonstration studies were carried out in 4 fields, including silage corn / soy, sesame, peanut and melon, in Isparta.

BATEM Agricultural Extension and Training Department provides services on agricultural visits and trainings on agricultural issues. In this context, cooperation can be made for the PAPs in the project affected settlements to benefit from these services.

## Mitigation Measures

**According to findings of the study, there is no requirement to provide additional impact mitigation measures in the settlements included in Phase I, since there are no PAPs affected by 20% or more of the total land used and / or owned.**

For this reason, no agriculture and livestock production programme has been designed for income-generating mitigation measures under the RAP. However, if different findings result from the studies to be carried out by DSI depending on the update of the RAP, it may be necessary to develop income-generating programmes.

Although the mitigation measures proposed under the RAP are specified in detail in the entitlement matrix; these measures can be summarized as follows:

**The following measures can be summarized regarding land and immovable property acquisition:**

* Identification of the prices of lands and immovable properties within registered lands covering the replacement value thereof
* Payment of crop and tree values
* Modification of zoning alterations for the parcels within the zoning area, or changing the project route; in case these mitigations cannot be implemented, the entire land is expropriated
* Ensuring that land users who have the right to customary use in non-registered lands obtain a payment corresponding to their customary right and the calculation of lands and immovable properties over the replacement value and the payment of crops and tree prices
* Payment of a compensation as an expropriation price that will cover the replacement value
* Payment of permanent and temporary easement fees for immovable properties
* It can be summarized as the determination of land users, including the defendant parcels, and the payment of the product price to the users or official tenants.
* Not entering the lands before expropriation costs are deposited in the bank.
* Do not enter the land for the disputed lawsuit without depositing the land acquisition compensation value to the account determined by the court.
* Restoration and delivery of lands at the end of the 3-year temporary easement period.

**These measures can be summarized as follows regarding livelihoods and vulnerable groups:**

* Organization of training events on irrigated agriculture, crop pattern, smart agricultural practices etc. by the relevant institutions,
* Organization of information events on the agriculture and livestock production grant schemes introduced by institutions such as the Ministry of Agriculture and Forestry and BAKA,
* Organization of information events for vulnerable groups regarding İŞKUR and SYDV supports,
* Organization of various demonstrations for water users,
* Removal of concrete water channels and the opening of these areas to agriculture,
* Creation of passageways for the access of animals to pasture lands during construction activities,
* Compensation by the firm the damages that may be caused by the contractor during construction.

## Cut-off Date

A cut-off date will be in place for the identification of rights holders. Cut-off date is defined as the date of completion of the count of PAPs and assets inventory of immovable properties. Persons occupying the project area after the cut-off date will not be taken into consideration for compensation and/or resettlement assistance. Similarly, fixed assets (such as built structures, crops, fruit trees, and woodlots) established after the date of completion of the immovable assets inventory, or an alternative mutually agreed on date, will not be compensated. This date will be the date of announcement of the public interest decision.

The cut-off date for the first section is 31 August 2020 the date when census of the land and the inventory of assets was delivered to DSI.

The cut-off date for the second section will be based on census completion prior to expropriation. The second cut-off date will be announced before census for asset inventory commences, and completion of census date will be the cut-off date for the second section.

## Entitlement Matrix

The entitlement matrix created within the framework of the relevant studies is shown below. If necessary, the matrix will be updated depending on the impacts to be identified and the measures to be taken while updating the RAP.

Table 5‑2. Entitlement Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subject of Replaced Entitlement/Impact Subject to Compensation | Project-Impacted Persons/Communities | Method of Compensation | Implementing Agency | Additional Provisions |
| Land | | | | |
| 1. Permanent ownership acquisition | 1.1. Registered Privately-Owned Landowners | * A cash compensation at replacement value for immovable property * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached, and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not be proceed before the expropriation fee is deposited into the bank accounts. * Information will be provided on land acquisition, expropriation process, legal rights, valuation and appraisal. * Unpaid crop prices, if any, will be paid before entering the land. | DSI and Municipality | The land is acquired permanently, and its ownership is registered in the name of DSI.  Expropriation actions and procedures will be carried out in accordance with the Turkish legislation.  Lands and fixed assets are compensated at replacement cost (to be valued on the date of commencement of the project) and in a way to allow Affected Persons to acquire equivalent assets.  Lands are valued by the experts designated by DSI in line with the procedures stipulated in laws. Lands are value through the capitalization of annual net income. “Atabey Irrigation Renovation Project Land Market Research Report” is taken into consideration in determining the compensation fees to be paid for the lands.  Legal expenses incurred as a result of the agreements concluded with regard to expropriation procedures as per Article 8 of the Expropriation Law will be covered by DSI.  PAPs will be informed about land acquisition.  PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.  If additional land acquisition is required, the rules specified in the RAP apply.  In the event that the expropriation impacts parcels in the zoning area which prevents further construction on the parcel, a change of route will be applied, and if it is not possible, the municipality will apply for zoning modification in the parcel. If all these are not achieved, the entire parcel will be expropriated.  PAPs are informed about the progress on the disputed parcels. |
| 1.2. Households whose entire parcels are affected by expropriation | * For lands within the zoning area, if expropriation removes the zoning right in the whole parcel, alternatives will be sought, expropriation will be applied for the entire parcel as a last resort. |  |
| 1.3. Land users whose rights can be legalized  (Users entitled to customary right over treasury lands, the lands not subject registration and the lands owned by institutions) | * The legal process will be operated for the lands relevant to customary right as per the provisions of the Expropriation Law. In case of temporary losses in such lands, the following compensation method will be valid: * A cash compensation that will be sufficient for the acquisition of an equivalent immovable property will be extended * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not be proceed before the expropriation fee is deposited into the bank accounts. * Information will be provided on land acquisition, expropriation process, legal rights, valuation and appraisal. * Unpaid crop prices, if any, are paid before entering the land. | DSI |
| 1.3. Disputed parcels with lawsuits where one of the defendents are private persons | * In addition to the compensation methods specified in permanent ownership acquisition, the land will be entered after the expropriation price is deposited in an account number determined by the relevant court, without waiting for the conclusion of the case. When the result of the lawsuit regarding ownership is finalized, the legal owner can withdraw the expropriation value from the account number. | DSI and the relevant court |
| 2. Acquisition of permanent easement | 2.1. Registered Privately-Owned Landowners/Users | * The easement price prescribed by the Law regarding lands will be compensated to registered owners and land users. * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not proceed before easement fees are paid. * A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. * Unpaid crop prices, if any, are paid before entering the land. | DSI and Municipality | DSI is entitled to use the land during construction. However, its ownership continues to be registered in the name of the landowner/owners.  When the construction is complete, the land is handed over to the landowner.  Landowners and/or users cannot build any structure or fixture or plant any tree over the pipeline.  The land in question will be made ready for use before it is handed over to its respective owner.  PAPs will be informed about land acquisition  If the right of easement prevents the construction of the whole parcel in the lands within the zoning area, the route change will be applied by DSI to make a zoning modification in the said parcels. If all these are not achieved, all of the parcels in question will be expropriated. |
| 2.2. Land users whose rights can be legalized (for example, those who have the right of possession over the land) | It will be ensured that land users who have the right of possession will receive the title deed of the land in question. In case of temporary losses in such lands whose title deed is acquired, the following compensation method will be valid:   * The easement price will be compensated for the land as per Article 19[[12]](#footnote-12) of the Expropriation Law. * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not proceed before easement fees regarding the right of possession are paid. * A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. * Unpaid crop prices, if any, are paid before entering the land | DSI | The land in question will be made ready for use before it is handed over to its respective owner. |
| 2.3Disputed parcels in which one of the parties is a person (Cases concerning the ownership of the previously started property) | * In addition to the compensation methods specified in the acquisition of permanent easement right, the land will be entered after the easement fee is deposited in an account number determined by the relevant court, without waiting for the conclusion of the case. When the result of the case is finalized, the legal owner can withdraw the expropriation value from the account number. | DSI and the relevant court |  |
| 3. Temporary land loss (establishment of easement and land restrictions)  (corridor) | 3.1. Registered Privately-Owned Landowners/Users | * The easement price prescribed by the Law regarding lands will be compensated. * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not proceed before easement fees are paid. * A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. * Unpaid crop prices, if any, are paid before entering the land. | DSI | DSI is entitled to use the land during construction. However, its ownership continues to be registered in the name of the landowner/owners. When the construction is complete, the land is handed over to the landowner.  Landowners/users can use their lands following construction without any restriction of use.  The land in question will be made ready for use before it is handed over to its respective owner.  PAPs will be informed about land acquisition. |
| 3.2 Land users whose rights can be legalized (for example, those who have the right of possession over the land) | * The easement price will be compensated for the land as per Article 19 of the Expropriation Law. * A Land Entry Protocol will be prepared for the parcels, whose owners can be reached and which are requested, and land entries will be made accordingly. The protocol will be announced at mukhtar's offices. * Land entry will not proceed before easement fees regarding the right of possession are paid. * A Land Exit Protocol will be prepared and implemented for the owners or users who file such a request or are accessible for the approval of the landowner and/or user. The protocol will be executed with the signatures of DSI, the Contractor and two members from the village council. * Unpaid crop prices, if any, are paid before entering the land. | DSI | The land in question will be made ready for use before it is handed over to its respective owner. |
| 4. Right to Temporary Use (Temporary facilities, camps, construction sites, stockpiling areas, etc.) | 4.1. Registered privately-owned parcels and/or public lands | * Lands are rented under the terms and prices agreed upon with the respective landowners. Upon the expiry of the contract concluded by the contractor, the lands are restored and handed over to their owners. * Lands are used in accordance with the conditions stipulated in the rental contracts concluded with their respective owners and upon the completion of the work, they are restored and handed over to their owners. * An equitable rental fee will be paid by the contractor for temporary rental arrangements and the contractor will get the opinion of DSI in this matter. | DSI and Conractor | The land in question will be made ready for use before it is handed over to its respective owner.  Records of such temporary rental contracts will be kept by DSI. |
| Structures/Trees and Cultivated Crops | | | | |
| 5. Non-residential buildings (Stables, irrigation structures, water wells, fences, coops, etc.) | 5.1. Owners and users of immovable properties (including unauthorized users) | * A compensation for the replacement cost will be paid as per the legislation. * A compensation will be paid in a way to cover the replacement cost if unauthorized users prove their right of possession as per Article 19 of the Expropriation Law, | DSI | Depending on request of the owner, following the demolition of the building, the excavation or remaining materials will be left to the beneficiaries. Dismantling and transportation support will be provided for assets that can be used (fence, pole, pipe, etc.). |
| 6. Trees | 6.1. Owners and users of immovable properties | * A compensation will be paid for trees of economic value over the net present value (by considering the species, age, economic life, etc. of trees). * The ownership of affected persons for affected trees in common lands (treasury, etc.) will be identified with the support of DSI and they will be compensated. * Tree prices will be paid to their possessors as per Article 19 of the Expropriation Law. | DSI | Depending on request of the owner, following the demolition of the building, the excavation or remaining materials will be left to the beneficiaries. Dismantling and transportation support will be provided for assets that can be used (fence, pole, pipe, etc.). |
| 7. Cultivated crops | 7.1. Crop owners with a land title deed | * They will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield. | DSI | Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses |
| 7.2. Official tenants (on privately-owned and public lands) | * Official tenants of lands will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield. | DSI | Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses. |
| 7.3. Crop owners without any land title deed (including unauthorized users) | * They will be compensated in cash over the sales price acquired by growers at the time of harvest by considering the costs associated with expected yield. Ownerships will be determined with the support of DSI and compensated. | DSI | Where applicable, it will be necessary to wait until the time of harvest for preventing crop losses |
| 7.4. Product owners of the disputed parcels |  |
| **Livelihoods, Vulnerable Groups, Quality of Life** | | | | |
| 8. Land-based livelihood losses | 8.1 Landowners (who lost more than 20% of their lands)  8.2. PAPs whose entire parcel is impacted by expropriation  8.3. Female farmers  8.4. Vulnerable communities (the elderly, women, seasonal workers)  8.5. All other rights holders and the relevant local stakeholders | DSI will offer one or more of the opportunities listed below to restore livelihoods:   * It will provide information on the agriculture and livestock production supports that can be offered by institutions. * Information, capacity building, agricultural consultancy and training services will be offered on irrigated agriculture. * Water users will be informed about smart irrigation systems/smart farming practices. * It will be ensured that female farmers and vulnerable groups benefit from the services of the WUA offered with DSI (on-farm water management) and the Ministry of Agriculture and Forestry such as agricultural consultancy/training. * During the construction period, water users will be able to benefit from the irrigation service of the WUA. * Open reinforced concrete canals that will become dysfunctional during the construction period will be removed. * Information will be provided regarding the grant schemes for supporting individual irrigation systems under rural development supports and assistance will be offered in relation to project preparation. * The water valves to be provided to users within the project will be placed in common use areas as much as possible, and it will be avoided to place valves in privately-owned fields as much as possible. If deemed necessary, changes will be made concerning valve locations. * The area to be made available for irrigation and irrigated agriculture will be increased. * An irrigation programme will be prepared for farmers.   Demonstration programmes will be developed for pilot farmers by the District Directorate of Agriculture and Forestry.   * DSI guarantees that contractors will prioritize unauthorized users and/or the families of vulnerable communities with regard to the need for labor force regarding potential temporary or permanent job opportunities associated with the project. * DSI guarantees that contractors will prioritize the procurement of services and goods from local suppliers. * Support will be offered to vulnerable communities and PAPs on SYDV and İŞKUR programmes. * Vulnerable communities will be informed about the project. | DSI  Institutions to Cooperate (IC)  (Provincial and District Directorates of Agriculture and Forestry, Municipalities, Special Provincial Administration, SYDVs, İŞKUR, Chambers of Agriculture, Development Agency  WUA  Contractor | During the modernization of irrigation systems, DSI primarily chose to make use of public lands for the permanent land acquisition needs of the projects.  Wherever possible, permanent land acquisition needs will be assessed as part of the 10% development readjustment share deduction subject to land consolidation and expropriation will be avoided.  Additional consultations will be held with vulnerable communities regarding their rights concerning livelihood losses.  PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.  If appropriate, DSI's IFSIF practice will allow the collection of gender-disaggregated data.  Cooperation will be established with the relevant institutions (the Provincial/District Directorate of Agriculture and Forestry, the Development Agency, the IWC).  Activities will be organized and training events will be held by the Ministry of Agriculture and Forestry in order to raise awareness of growers and water users on subjects such as the selection of appropriate irrigation methods, the planning of irrigation time, the correct implementation of crop rotation, water saving, modern irrigation methods, the reduction of water losses, water harvesting and plant pattern. Training activities will be carried out in a planned and continuous manner by the Ministry of Agriculture and Forestry. Efficiency of the training events will be annually evaluated by the Ministry of Agriculture and Forestry, and a certificate or a document of attendance will be issued to water users and growers.  Agricultural extension training will be offered to interested water users within the scope of Isparta Plain Project TEYAP. |
|  |  |
| 9. Restriction of access to livelihoods due to the lack of any passageway for animals and persons | 9.1. Farmers, animal owners | During the construction period, passageways will be created to provide access to grazing areas and water resources for bovine and ovine animals.  Upon request, troughs and/or water pools will be created for animals by Municipalities where they can meet their drinking water needs.  Information will be shared on the periods of access restriction and alternatives in a timely manner prior to such periods. | DSI, Municipality and Contractor | Complaints and requests from PAPs on this issue will be recorded and they will be informed about the practices to be introduced and the measures taken. |
| 10a. Damage to buildings, roads, houses and crops during construction | 10.1 All other PAPs | * In case of losses and damages caused by the contractor, the construction contractor will make the investigation and evaluation required for compensating and remedying the losses incurred. In cases where losses and damages cannot be remedied, the damaged buildings will be compensated by the contractor in accordance with the RAP. * In case of encroachments from the corridor other than technical necessities during the construction process, the incurred damages will be covered by the contractor in an equitable way. In such cases, lands will be left in a usable condition. | DSI and the Contractor | PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.  DSI will appoint a Public Relations Specialist (or specialists) to disseminate information about the GM.  Complaints will be handled at four levels within the scope of the project (Settlements, the Provincial Directorate, Regional and National level).  Local institutions and stakeholders will be regularly informed about prospective activities.  The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated. |
| 10b. Damage to infrastructure and superstructure during construction | * Damage to the existing infrastructures and superstructures (telecommunication lines, bridges, high-voltage lines, irrigation systems, etc.) will be avoided as much as possible. Apart from technical necessities, damages will be compensated by the contractor in accordance with the RAP upon the approval of DSI. * The relevant institutions will be regularly informed about the project route within the scope of stakeholder engagement | DSI and the Contractor |
| 11. Protection of the quality of life and public health during construction | 11.1 PAPs | * ESMP measures will be implemented for the construction period. | DSI and the Contractor | The measures specified in the ESMP will be implemented and monitored (Grievance mechanism, dust, noise, traffic, waste management, hazardous waste, etc.). |

# Method of Valuation

The method of valuation proposed for affected assets is provided in detail in the Land Market Research report drawn up by HAPA firm.

## Valuation in Lands

Immovable properties to be expropriated are valued according to the capitalization of income by considering their market values and using the capitalization ratio to be calculated. Lands to be expropriated in Turkey are valued based on the criteria set in Article 11 of the Expropriation Lay and by considering all factors that will affect the value of immovable properties. So much so that valuation is performed through a reasoned valuation report based on the immovable property's:

a. Type and kind,

b. Area,

c. All qualities and elements which may affect its value and separate value of each element,

d. Tax return, if any,

e. Valuations performed by public authorities as of the date of expropriation,

f. As for lands, net revenue to be generated by immovable property and resource depending on its location and conditions and if it is used as it is,

g. As for parcels, sales price when compared to similar general sales prior to the date of expropriation,

h. As for buildings, official unit prices and construction cost calculations,

ı. Other objective criteria which may affect the valuation.

Hence, 4 important criteria are used in calculating the expropriation value of an immovable property.

A. Net income: A land is affected by many factors such as dry or irrigated agriculture, slope, crop productivity and crop sales price.

B. Capitalization ratio: It is calculated by dividing the average net income of the land by the actual sales prices (market values). Capitalization ratio is affected by many factors.

C. Market values ​​of lands: Refers to the value of real properties formed in the free market depending on supply and demand. In expropriations, land values ​​are calculated with the income method.

D. Characteristics of the lands: The parcel / land divisions, locations, irritability conditions, slopes, soil structures, soil depth, whether they will be exposed to flood and erosion, etc. needs to be determined.

## Valuation in Parcels

Parcels can be valued over 3 different criteria such as market price, conversion price and complementary value. It is compulsory by law to perform valuation as per the criterion of market price as regards the valuation of parcels for expropriation.

In practice, a parcel is usually valued through direct comparison with similar parcels whose actual selling price is known. Therefore, it is necessary to know the actual selling prices of parcels that are similar to the valued parcel in terms of various characteristics and to calculate the average m² price over these prices.

## Valuation of Buildings on Lands and Parcels

If there is a building on the areas to be expropriated, first of all, the square meters, classes and ages of these buildings are identified. The building unit prices annually announced by the Ministry of Environment and Urbanization are taken into consideration while unit price analyses are considered for the specially constructed buildings with no unit price and the building costs as of the time of expropriation are identified. Depreciations set by the class and age of buildings in Amended Article 23 of the By-Law on the Valuation of Tax Values as a Basis for Real Estate Tax as enforced through the Resolution of the Council of Ministers and published in the Official Gazette of December 2, 1982 are deducted from this building value and its expropriation price is calculated based on the cost criterion. In addition, the lack or excess of some elements of the building decreases or increases the unit square meter values for the buildings of the same class. Even a change of the quality of the materials used in buildings with the same properties changes the value of the building. In this case, what needs to be done is to calculate the costs of deficiencies or excesses of the building with an available inventory and deduct them from the building value or add them to the building value.

Within the scope of the RAP, a compensation fee will be paid to cover the full replacement cost for buildings. In this project, **there is no building (residential, houses, etc.) that may be subject to depreciation according to the land identification activities for the first section**.

## Debris Value

In the event that the debris is kept by the owner, the calculated debris price must be deducted from the total price. However, the costs of demolition and haulage must also be calculated and paid to the owner.

## Precedent Value Comparison for Easement

In order to calculate the price of easement to be established over a parcel, the selling prices of the parcels that will set a precedent for the said parcel are identified. Then, an analysis is performed as to the prospective value of the entire parcel following the establishment of easement and the difference between these two values will be the easement price.

When calculating the easement price for lands, the difference between the values of the immovable property before and after easement to be calculated based on the selling prices of precedent immovable properties prior to the date of expropriation will be the easement price.

When calculating the post-easement immovable property for parcels, it will be necessary to consider the restrictions imposed on the use of the immovable property (whether or not to allow construction and, if yes, what will be the upper floor limit and the restrictions on green spaces must be identified). In the establishment of easement, the valuation commission and the expert must determine the following matters.

1. Value of the land expropriated due to the passage of watercourse, high-voltage line, natural gas and oil pipeline over or under the land,
2. Value of the damage incurred due to this transition or partial utilization.

The expropriated land is valued according to the methods used in full expropriation. The loss suffered by the landowner is calculated according to the net income method. In this respect, the land's pre and post-easement values are calculated. The difference between them gives the land's easement price.

The following criteria will be considered for determining the loss of value due to easement for the immovable properties over which easement is established:

* Area of the immovable property,
* Geometric condition of the immovable property,
* Kind of the immovable property (such as parcel, land and building)
* Type of use for the immovable property (type of use if it is a building)
* Direction of the section and immovable property over which easement is established
* Quality of the public service subject to the establishment of easement, etc.

Many factors such as the width of the area over which easement is established, the share of the immovable property within the area, perceived/known health risks, terrorism and accident risks must be taken into consideration. Rate of the loss of value cannot be increased or decreased due to any potential fault in the future depending on the kind of the facility, which is the subject matter of easement. Other potential loses may only be subject to compensation under general provisions.

Easement may be established over orchards or woodlots without any fruit and some or all of the trees may be cut down. In this case, it will be necessary to calculate the easement price based on the criterion of income capitalization. The difference between the price to be calculated depending on the income to be obtained according to the pre-easement land use and the post-easement land price will give the easement price. Price of the cut-down fruit trees is calculated and paid. The calculation is made by also taking into account the level of impact for the bare land.

## Temporary Easement Price

Easement is established for a period of 2-10 years or, in other words, (n) years. If it is temporary easement, then the net income loss to be incurred over the easement area in (n) years is accumulated to the date on which easement is established.

If temporary easement is established, the loss of value is not calculated as if there is permanent easement over the entire immovable property. The incurred loss is calculated by considering the income or rental fee deprived during the easement.

According to the decisions of the Supreme Court, the two-year easement right is the two-year income of the location where the easement right is established. If asset is rented, it is stated that the rental fee is the loss of the product to be obtained if it is planted.

## Permanent Easement Price

If the duration of easement is long, it is defined as an indefinite easement such as 49-99 years. The difference between the pre-easement land value and post-easement land value or, in brief, the loss of value concerning the land value is the easement price.

1. Calculating the loss of income to be incurred to due to net income loss (decrease in productivity or increase in costs)
2. Change in the capitalization interest rate
3. Net income loss can be calculated by considering the change in the capitalization interest rate.

Loss of income to be incurred due to net income loss:

Easement is calculated by proportioning the difference between the pre-easement net income and the post-easement net income to the capitalization interest rate. While calculating the post-easement net income;

* Kind of the immovable property,
* Its type of use,
* Its size,
* Location of the area over which easement is established,
* Its area,
* Its geometric condition is taken into consideration and the amount of decline in productivity or the change in costs are identified.

Regarding long-term easement arrangements, prices of the parcels cannot exceed 35% of the value of the land affected by easement in terms of the amount of compensation. It cannot exceed 50% for parcels. This ratio refers to the maximum amount set by the Court of Cassation as per Turkish laws. There is no change in the ownership of lands and these restrictions disappear when the use of lands comes to an end.

## Calculation of the Loss of Value from Permanent Easement

As per the Expropriation Law and the case-law of the Court of Cassation, the loss of value to be incurred regarding immovable properties due to expropriation is considered as the expropriation price in the establishment of easement and this price is valued by considering the kind of the immovable property (a parcel or land), its type of use, size, location of the area over which easement is established, its area, geometric condition and the nature and route of easement.

## Replacement Cost

In line with the legislation of the World Bank, it is mandatory to pay a replacement cost for the persons losing their lands permanently due to the respective public service within the framework of international standards. Items of replacement cost that must be paid to those losing their lands due to expropriation within Atabey Irrigation Renovation activities are:

* Charges of buying and selling at the land registry administration,
* Revolving fund fee of the land registry administration,
* Transportation costs.

Pursuant to the land registry legislation in force, each and every one of those who will buy and sell their properties (buyer-seller) at a land registry administration must pay a 2% title deed fee over the selling price declared at the land registry administration. In addition, it is necessary to pay the revolving fund fee set for each district. Furthermore, transportation costs regarding this transaction may be incurred.

In this case, an additional 2.19% replacement cost must be added to the unit expropriation values. Since the replacement cost payment will be covered by the expropriation price, there will be no addition to the price, and the expropriation price to be paid to those losing all or a part of their lands will also include the replacement cost.

## Calculation of the Tree Price

After determining the bare soil value of the land covered with fruit or non-fruit trees, the price is calculated according to a determined formula due to the age of each tree.

After determining the value of a certain t-year-old woodland in the study, the value of the trees according to their ages can also be calculated. Accordingly, it was obtained by dividing the difference between the value of a fruit and a fruitless tree at a certain age by the number of trees per decare.

Tree Value = (Dt-D0) / Number of Trees per Decare

# Consultation and Engagement

OP 4.12 requires preliminary consultation with PAPs within the projects financed by the World Bank. In this context, DSI will hold consultation meetings with the Water Users Associations and local communities that remain within the project's area of influence before the beginning of modernization works and also document these meetings. Overall information on the project will be shared at consultation meetings, including the rationale of the project and its land requirements and impacts, the legal rights of those likely to be affected and the work schedule. Contact information of the project officer, who is assigned to be contacted for questions and problems about land acquisition and other construction impacts, and the hours for access to him/her will be shared with all local stakeholders. The Stakeholder Engagement Plan, which includes different messages to be conveyed during the meetings to be held by DSI with different groups of stakeholders as well as the methods of engagement is provided in this section. DSI will ensure that issues related to land acquisition are addressed during these meetings. Similarly, the Grievance Mechanism to be established by DSI will be open to objections and complaints regarding land acquisition. DSI will try to resolve these feedbacks and complaints as much as possible within the framework of irrigation modernization activities.

DSI will assign a project unit for the project. The project communication officer to be appointed for the project will record the major questions and problems raised at the meetings as well as the steps taken to resolve them. S/he will also proactively explain the issues that are important for the people attending the meetings organized within the scope of the project and endeavor to inform all stakeholders within the project process. During consultation activities, DSI will keep a record of all objections and complaints received and resolved through the Grievance Notification Mechanism and semi-annual monitoring reports.

## Stakeholder Engagement Activities

A public participation meeting was held in Isparta Atabey on 20 June 2018 in order to introduce the ESMF, RAPF and Atabey ESMP and to receive opinions of PAPs. The meeting was held with 120 participants, 6 of whom were women, with the participation of WUA members, irrigation officers and workers and local people. The meeting was attended by Deputy Regional Director of DSI, Project and Construction Branch Manager, Operation and Maintenance Branch Manager, Survey and Evaluation Branch Manager and Map Engineer from DSI General Directorate Real Estate and Expropriation Department, and Atabey WUA President and Manager .

Operation and Maintenance Branch Manager of DSI Regional Directorate gave a brief information about the Atabey irrigation system. Following this introduction, the Project financed by the World Bank was disclosed to the public. DSI Real Estate and Expropriation Department Director of Survey and Assessment Department presented the Resettlement Acquisition Policy Framework and explained its scope, the additional measures that will be implemented by DSI to eliminate the gaps between national and international standards. DSI first introduced the national legal framework for land acquisition, then discussed World Bank measures and policies to be observed in four irrigation systems supported by World Bank funding. Although it is not preferred by DSI, expropriation may be required in some parts of the system. DSI stated that the studies and land acquisition plans will be prepared in accordance with the World Bank policies. Considering that there are also landowners among the participants who have not yet been subject to land consolidation, DSI explained the land consolidation and its benefits to the participants in detail. Most of the questions asked were about land consolidation. DSI also introduced the grievance reporting mechanism to be implemented under the project. Nevertheless, the public was assured that more than one consultation meeting would be held during the consolidation process, and DSI officials said that the consolidation practice would not cause any problems for the citizens, on the contrary, a land consolidation to be carried out as described would reduce all kinds of costs and costs, by consolidation of 4 or 5 parcels into a single parcel, reiterated that overall increase in production would be achieved. The growing demand of farmers and water users associations for land consolidation was noted at the meeting.

## Field Findings on Stakeholder Engagement

One of the findings of interviews with the mukhtars in the affected settlements, is that all mukhtars were informed about the Project. Main source of information for majority of the mukhtars were through the WUA and the information meeting organized. 11 out of 15 mukhtars attended the Project information meeting.

Figure ‑. How did you hear about the project? - Mukhtars

According to the household surveys, approximately 95% of the PAPs are aware of the Project, but only 20% of them stated that they have sufficient information.

Table 7‑1. Stakeholder Engagement Field Findings

|  |  |  |  |
| --- | --- | --- | --- |
|  | Do you know Irrıgation Project? | Do you have enough information on the Project? | Would you like to receive further information? |
| Yes (%) | 94,6 | 19,6 | 73,9 |
| No (%) | 5,4 | 80,4 | 26,1 |

Source: Socio-Economic Household Survey, 2020

PAPs, who were informed about the Project, were asked through which channel they were informed. The institutions / persons that the PAPs most frequently mentioned were mukhtars, family members, WUA and DSI, respectively.

Figure 7‑2. How did you hear about the project? - PAPs

Figure 7‑3. Distribution of the Most Requested Information by PAPs

In the field study, all of the mukhtars stated that they expect a positive impact from the Project, and only one mukhtar criticized the Project negatively for the insufficient scope. According to the mukhtar surveys, the highest expectation of the mukhtars from the Project is the prevention of water waste.

It has been observed that the PAPs interviewed have a generally positive impression about the Project. According to the household surveys, 80% of the PAPs stated that they expect a positive impact from the Project, and foremost positive impact is reducing water waste/loss. As a negative impact, some PAPs have expressed their concern that water charges will increase.

## Announcement and Disclosure Process of the Project

This is the draft RAP for public disclosure. This RAP will be published on the websites of the World Bank and DSI both in Turkish and English and announced to the stakeholders and PAPs at local level in the fourth quarter of 2020 prior to implementation. The RAP will be updated in December 2020 in line with the feedbacks received. This section 7.3. will be revized and updated according to the results of the consultation and disclosure RAP. Revised version of RAP will be published on the official website of DSI.

Since March 2020, consultation process could not be continued as stated in the Stakeholder Engagement Plan due to the measures to be followed under Covid-19 pandemic in order not to endanger human and public health. However, DSI will take relevant measures in this direction and continue the consultation process through alternative channels (internet, SMS, telephone, etc.) as much as possible.

After the restrictions of the pandemic process are lifted, the second phase studies will be added to this RAP document and the RAP will be updated. The consultation will be conducted by re-publishing the RAP document in accordance with WB OP 4.12.

The changes to be made to the RAP during the implementation of the Project will be announced to the stakeholders in the same way upon the review and update of this document and other project documents that may be relevant. The flowchart of announcement process of RAP is shown below.

Figure 7.5. RAP Approval and Announcement Process

### 7.3.1. AEP Announcement, Consultation and Feedback Process

For the consultation works that coincide with the Covid-19 Pandemic process, DSI will carry out the consultation process by sharing the information about the project with its stakeholders, using virtual and electronic consultation methods, in accordance with the needs of the project and the communication infrastructure. For this purpose, DSI will publish the information documents produced within the scope of the RAP preparation, especially this RAP, on the official website, make the necessary announcements via e-mail, SMS, mail and social media, online forms, DSI's phone lines and record all received feedback from these channels.

In line with the feedback received, the RAP entitlement matrix, the land acquisition impacts of the project and the measures to be implemented will be reviewed and the RAP will be updated to reflect the results of the disclosure, consultation and feedback process.

In addition to the RAP, an RAP summary not exceeding 10 pages, a 2-page RAP brochure, RAP summary video and RAP presentation will be prepared and these will be published on the DSI website.

Due to the Covid-19 measures, meetings to be held for RAP promotion and distribution of materials (summary, brochure, etc.) were not held. The documents shared during disclosure meetings that include- RAP summary, RAP presentation, RAP brochure- will be published on DSI web page and printed documents will be sent by the DSI Regional Directorate to the mukhtars in the area of he WUA and in all settlements affected by the project.

RAP will be sent to Isparta, Atabey, Eğirdir, Gönen and Kuledibi Municipalities, Isparta Governorship, Atabey, Eğirdir and Gönen District Governorships, Isparta Provincial Directorate of Agriculture and Forestry, Atabey, Eğirdir and Gönen District Directorates of Agriculture and Forestry, Western Mediterranean Development Agency, Süleyman Demirel University Faculty of Agriculture and Isparta, Atabey, Eğirdir and Gönen Agriculture Chambers, with a official letter.

Atabey WUA; DSI will inform its members about the information and documents by sending SMS to approximately five thousand members regarding the RAP web page information link and the consultation process.

## RAP Stakeholder Engagement Responsibilities of Internal Stakeholders

Table 7‑2. RAP Stakeholder Engagement Responsibilities of Internal Stakeholders

|  |  |
| --- | --- |
| Internal Stakeholder | Responsibilities |
| World Bank | - Reviewing and approving the RAP and disclosing it to the public on the WB's official website  - Supporting DSI field staff and WUA representatives for the preparation of gender sensitivity training |
| *DSI* |  |
| Department of Real Estate and Expropriation | - Ensuring that information meetings are held  - Following the closure of complaints about land acquisition  - Ensuring that the expropriation price is set as per Article 8 of the Expropriation Law in a way to cover the replacement cost and the PAPs are interviewed  - In the absence of any agreement, filing lawsuits as per Article 10 and performing expropriation procedures in favor of the project  - Managing monitoring and evaluation activities regarding the RAP |
| Department of Project and Construction | - Publishing the RAP on DSI's official website  - Ensuring that regular monitoring activities are performed for the implementation of RAPs |
| 18th Regional Directorate of Isparta | - Preparing the brochures and other information documents required for informing the public and the relevant stakeholders  - Appointing a Public Relations and Environment Specialist who will work in the district to manage the impacts of the project, the construction plan, the rights and entitlements of the PAPs and the grievance mechanism at local level  - Conducting inspections regarding the implementation of the RAP by the construction contractor, making recommendations and deciding whether additional measures are required or not  - Ensuring that the contractor remedies complaints and damages arising therefrom  - Operating the Grievance Mechanism  - Coordinating with local and regional stakeholders to be collaborated, developing and implementing collaborations  - Supporting DSI field staff and WUA representatives for the preparation of gender-associated training  - Bearing responsibility for monitoring and evaluation activities regarding the RAP  - Preparing documents regarding land restrictions and executing the relevant information activities  Following and closing complaints about land acquisition  - Setting the expropriation price as per Article 8 of the Expropriation Law in a way to cover the replacement cost and conducting interviews with the PAPs |
| DSI Isparta Section Directorate | - Holding public consultation meetings  - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders  - Informing the employees of the Water Users Association about the Grievance Mechanism  - Operating the Grievance Mechanism  - Identifying PAPs in the field (User, level of impact, etc.)  - Regularly informing the Water Users Association and PAPs about developments on the project |
| Atabey Water Users Association | - Informing PAPs about the project  - Creating a database regarding the Grievance Mechanism, conveying incoming complaints to DSI  - Distributing the brochures and other information documents required for informing the public and the relevant stakeholders  - Examine the damages that may arise from the contractor on site and reporting them to DSI |
| Contractor | - Managing the Grievance Mechanism at the contractor level and submitting incoming complaints to DSI at regular intervals  - Monitoring field activities regularly (daily, weekly and monthly, etc.)  - Ensuring that the damage regarding the construction work is remedied or repaired as specified in the RAP (for example, damage to the crops or infrastructure) |

## RAP External Stakeholder Engagement Plan

Table 7‑3. RAP External Stakeholder Engagement

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Subject of Engagement | Details of Engagement | Procedure of Engagement | Targeted Stakeholders | Frequency (recommended) |
| 1 | Information Meetings for Atabey Water Users Association Project  (the beginning and completion dates of construction, design, implementation, investment programme, etc.) | The PAPs interviewed and the mukhtars of the affected settlements stated that they wanted to be informed about the project details and the subject that they wanted to get the most information about was the details of the project.  Accordingly, DSI and the Water Users Association will inform them about the project's beginning and completion dates, the project's technical design, its potential benefits/harms, tender processes, construction phases and expected outputs.  More information will be shared concerning the Project due to the meetings to be held at Atabey Water Users Association and the affected settlements, etc.  Information activities will continue to be performed regularly during the construction phase of the project.  Communication will be established by DSI between the contractor and the Water Users Association concerning the implementation of the project. | Information Meetings  Brochures and Posters  Sharing the project reports  Press Releases  DSI Website  Online Meetings | Members of the Water Users Association | Every 6 months |
| Those Who Are Not the Members of the Water Users Association | Every 6 months |
| Vulnerable groups | Every 6 months |
| Isparta Governorship | Once a year |
| Isparta Municipality | Once a year |
| Eğirdir, Atabey, Gönen, District Governorships | Every 6 months |
| Eğirdir, Atabey, Gönen, Central SYDV | Every 6 months |
| Eğirdir, Atabey, Gönen Municipalitities | Every 6 months |
| Eğirdir, Atabey, Gönen District Directorates of Agriculture | Every 6 months |
| Isparta Provincial Directorate of Agriculture | Every 6 months |
| Eğirdir, Atabey, Gönen, Central, Sevinçbey, Beydere Agriculture Chambers | Once a year |
| Mukhtars | Every 6 months |
| West Mediterranean Development Agency (BAKA) | As needed |
| Isparta Chamber of Commerce and Industry | As needed |
| Isparta Commodity Exchange | As needed |
| Western Mediterranean Agricultural Research Institute | As needed |
| İŞKUR | As needed |
| Süleyman Demirel Üniversity | As needed |
| Isparta Uygulamalı Bilimler Üniversity | As needed |
| Agricultural workers (Seasonal, etc.) | As needed |
| 2 | Grievance Mechanism | The Project's Official Grievance Mechanism and Registration System will be introduced and the stakeholders will be informed on this matter. The grievance mechanism and notification channels will be open to anyone with requests and concerns regarding the project. The project's grievance system and communication channels through which PAPs can report their complaints and requests will be shared both through printed materials such as posters and brochures and verbally during stakeholder engagement meetings. Stakeholders will be informed by DSI about the resolution processes of their complaints and requests. | Meetings  Brochures and Posters  DSI Website  Reports  Press Releases  Grievance Forms | PAPs |  |
| Members of the Water Users Association | Every 6 months |
| Those Who Are Not the Members of the Water Users Association | Every 6 months |
| Eğirdir, Atabey, Gönen, District Governorships | Every 6 months |
| Isparta Municipality | Every 6 months |
| Eğirdir, Atabey, Gönen Municipalitities | Every 6 months |
| Agricultural workers (Seasonal, etc.) | As needed |
| Mukhtars | Every 6 months |
| Isparta Provincial Directorate of Agriculture | Every 6 months |
| Eğirdir, Atabey, Gönen Tarım İlçe Müdürlükleri | Every 6 months |
| Eğirdir, Atabey, Gönen, Central, Sevinçbey, Beydere Ziraat Odaları | Once a year |
| 3 | Land Acquisition (expropriation, permanent and temporary easement) | PAPs will be informed about their land acquisition rights and potential land use restrictions.  PAPs will be regularly informed about the land acquisition activities carried out by DSI.  PAPs will be informed in detail about the stages of land acquisition.  Complaints and requests regarding land acquisition will be recorded and resolved within the scope of the project's grievance and demand system and the stakeholders will be informed in this matter.  Interviews will be conducted with the PAPs regarding the expropriation price set as per Article 8 of the Expropriation Law.  A Land Acquisition Information Guide will be prepared and shared with the PAPs.  A brochure will be prepared on land use restrictions and shared with the PAPs. | Information Meetings  Legal documents (notices, new subdivision plans, etc.)  DSI Website  E-mail  Phone | Members of the Water Users Association | Regularly during land acquisition period |
| Those Who Are Not the Members of the Water Users Association | Arazi edinimi süresince düzenli |
| Eğirdir, Atabey, Gönen, District Governorships | Once a year |
| Isparta Municipality | Once a year |
| Eğirdir, Atabey, Gönen Belediyeleri | Once a year |
| Isparta Provincial Directorate of Agriculture | Once a year |
| Eğirdir, Atabey, Gönen Tarım İlçe Müdürlükleri | Once a year |
| Mukhtars | Regularly during land acquisition period |
| PAPs impacted from land acquisition (legal owners and rightful users) | During land acquisition period as needed |
| 4 | Acquisition of Immovable Properties (water well, shelter, tree, etc.) | PAPs will be informed about their rights regarding the acquisition of immovable properties.  PAPs whose immovable properties are affected will be regularly informed about the immovable property acquisition activities carried out by DSI.  Complaints and requests regarding the acquisition of immovable properties will be recorded and resolved within the scope of the project's grievance and demand system and the stakeholders will be informed in this matter. | Information Meetings  DSI Website  DSI Website  E-mail  Phone | PAPs impacted from acquisition of immovable properties (legal owners and rightful users) | Throughout acquisition of immovable assets |
| 5 | Groundwater users | Information will be provided on how the water wells used for irrigation will be affected by the project during its construction and operation periods as well as their rights and restrictions of use. | Information Meetings  DSI Website  E-mail  Phone | Users irrigating through a water well | Once a year |
| Mukhtars | Once a year |
| 6 | Update and introduction of the RAP | After the announcement of the RAP, it will be updated with the opinions of stakeholders and announced again. If deemed necessary as a result of the activities to be performed for the acquisition of remaining lands, the RAP will be updated and the PAPs and mukhtars will be informed in this matter. | Information Meetings  DSI Website | WUA members | As needed |
| Non-members of WUA | As needed |
| Vulnerable groups | As needed |
| PAPs impacted from land acquisition | As needed |
| Mukhtars | As needed |
| 7 | Removal of canalettes and making open canal areas available for agriculture | PAPs will be informed by DSI and the Water Users Association about the removal of canalettes and making open canal areas available for agriculture during the construction process. | Information Meetings  DSI Website  Brochure/poster | WUA members | Once a year |
| Non-members of WUA | Once a year |
| Mukhtars | Once a year |
| 8 | Ensuring access to fields and grazing areas | Crossing points will be created where necessary in order to provide the PAPs with access to the fields and to allow animals to pass to the grazing areas during the construction phase of the project and the PAPs will be informed in this regard. Complaints about this issue will be followed up and resolved. | Information Meetings  DSI Website  Brochure/poster | WUA members | Once a year |
| Non-members of WUA | Once a year |
| Mukhtars | Once a year |
| 9 | Water supply during the construction process | PAPs will be informed by the Water Users Association and DSI about how to supply water during construction, the relevant water planning and water quantities. | Meetings  DSI Website | WUA members | Once a year |
| Non-members of WUA | Once a year |
| Mukhtars | Once a year |
| 10 | Female water users | Meetings will be held to improve the knowledge of women on the project.  Information meetings will be organized by DSI for female water users with regard to the features of the new irrigation system, alternative farming methods and capacity building and improvement for registration in Water Users Associations. Gender equality will be observed during such meetings and the meetings will be organized prior to the irrigation season. (The women that will attend the training events will need to be chosen while the venue of training will be selected by considering the needs of women. Timing of the training must also be identified outside the busy seasons for agricultural activities and the times during which women are working in their fields.) | Information Meetings  Brochures and Posters  DSI Website  Field Visits  Monitoring and evaluation  Reports  Grievance Forms | Female members of the Water Users Association | Once a year |
| Female water users who are not the members of the Water Users Association | Once a year |
| 11 | Irrigation Methods and Techniques (drip irrigation, sprinkler, etc.) | Upon the completion of the construction phase of the project, information will be provided on the irrigation systems that will boost productivity depending on the crop pattern.  If necessary, agricultural training events will be organized by the Provincial and District Directorates of Agriculture and Forestry for the stakeholders. | Meetings  Brochures and Posters  DSI Website  Field Visits | Members of the Water Users Association | Once a year |
| Those Who Are Not the Members of the Water Users Association | Once a year |
| Mukhtars | Once a year |
| Chamber of Agriculture | Once a year |
| 12 | Recommended Crop Pattern | Depending on potential changes regarding water supply during the construction and operation periods, recommendations will be made and information will be provided about the crop pattern.  If necessary, agricultural training events will be organized by the Provincial and District Directorates of Agriculture and Forestry for the stakeholders upon the completion of the construction phase. | Meetings  Brochures and Posters | Members of the Water Users Association | Once a year |
| Those Who Are Not the Members of the Water Users Association | Once a year |
| Provincial and District Directorate of Agriculture | Once a year |
| 13 | Information about Smart Farming practices | Smart Agriculture practices will be introduced for PAPs with the Provincial/District Directorate of Agriculture. In this way, the PAPs will be able to learn about the Smart Agriculture practices they can apply after the completion of the modernization construction activities. | Meetings  Brochures and Posters | Members of the Water Users Association | Once a year |
| Those Who Are Not the Members of the Water Users Association | Once a year |
| Mukhtars | Once a year |
| 14 | Cooperation with Local and Regional Corporate Stakeholders | Cooperation will be developed with local and regional stakeholders to identify the capacity building activities (agricultural extension, training, etc.) and support programmes to be organized for PAPs and let the PAPs know about them, execute the preliminary activities that must be performed during the operation phase of the project (crop pattern, the drip-irrigation system to be used, etc.), identify potential problems and develop measures to mitigate them and the PAPs will be informed about these activities. | Information Meetings  Brochures and Posters  Sharing the project reports  Press Releases  DSI Website  Online Meetings | PAPs | Once a year |
| Vulnerable groups | Once a year |
| Isparta Governor | Once a year |
| Isparta Municipality | Once a year |
| Eğirdir, Atabey, Gönen Municipality | Once a year |
| Eğirdir, Atabey, Gönen, District Governorships | Once a year |
| Eğirdir, Atabey, Gönen, Central SYDV Directors | Once a year |
| Isparta Provincial Directorate of Agriculture | Once a year |
| Eğirdir, Atabey, Gönen District Directorate of Agriculture | Once a year |
| Eğirdir, Atabey, Gönen, Central, Sevinçbey, Beydere Chamber of Agriculture | Once a year |
| Mukhatrs | Once a year |
| BAKA | Once a year |
| İŞKUR |  |
| Süleyman Demirel University | Once a year |
| Isparta Uygulamalı Bilimler University | Once a year |
| Western Mediterranean Agricultural Research Institute | Once a year |
| Isparta Chamber of Commerce and Industry | Once a year |
| Isparta Commodity Exchange | Once a year |
| 15 | Monitoring and evaluation | Stakeholders will be informed about the progress of the project.  Grievance notifications and stakeholder engagement processes related to the project will be monitored and followed. | Meetings  Reports  Field Visits  Performance Indicators  Monitoring and evaluation forms  Online meetings | Members of the Water Users Association | Once a year |
| Those Who Are Not the Members of the Water Users Association | Once a year |
| Eğirdir, Atabey, Gönen, District Governorships | Once a year |
| Isparta Municipality | Once a year |
| Eğirdir, Atabey, Gönen Municipality | Once a year |
| Isparta Provincial Director of Agriculture | Once a year |
| Eğirdir, Atabey, Gönen District Directorate of Agriculture | Once a year |
| Mukhtars | Once a year |

\*During the Covid-19 pandemic, communication channels such as website, notice boards, mail, SMS, e-mail will be used as much as possible for engagement.

# Grievance Mechanism

## Grievance and Demand Mechanism

DSI has created an easily accessible grievance mechanism to record and resolve negative/positive feedbacks or complaints to be made by the parties affected by the project during its implementation and other stakeholders. The grievance mechanism aims to manage all potential complaints and demands from affected stakeholders regarding land acquisition processes and/or any other environmental and social impacts and problems during the construction phase. Grievance Mechanism of the Project will be operated in accordance with the requirements of the World Bank policies.

DSI currently has a Grievance Mechanism composed of four main channels:

1. Water Users Associations

2. DSI Section Directorates

3. DSI Regional Directorates

4. General Directorate of DSI

Thereby, impacted persons or stakeholders will be able to submit their objections and complaints to any of these institutions/organizations via e-mail/telephone, or through personal complaints via national complaint reporting mechanisms such as CIMER (Presidential Communication Center).

All complaints regarding land acquisition will be collected at the 4th Regional Directorate of DSI in Isparta. The complaints collected at local level will be conveyed by DSI Isparta Section and Atabey Water Users Association to the 4th Regional Directorate of DSI in Isparta.

In addition, the complaints conveyed through “Flood, Fault and Intervention Spatial Information System” (FFISIS) mobile application, which has been developed by the General Directorate of DSI to allow early warning in case of floods and through which notifications regarding malfunctions and interventions can be made, will be taken into consideration by the project's grievance and demand mechanism.

Incoming complaints are electronically recorded by the Document Registration Section affiliated to the Department of Personnel under the General Directorate of DSI. (The complaints conveyed through written petitions, CIMER, public institutions and organizations, etc.) Real and legal persons can follow the electronically recorded complaints over turkiye.gov.tr address by identity authentication. Grievance and demand mechanism allows the anonymous grievances to be raised and addressed. These grievances will also be recorded.

Incoming complaints are directed by document registrars to the relevant units depending on the type and content of the complaint and examined and resolved within the specified response time (30 days). All complaints filed through written documents, applications or CIMER are recorded by DSI. In cases where the complaints notified by phone need to be resolved by DSI, the complainant is directed to convey his/her objection and/or complaint in writing via the Grievance Mechanism. The document registrars in all units prepare monthly reports on the complaints submitted both through the DSI Grievance Mechanism and CIMER. In addition, people can also submit complaints/demands to DSI over turkiye.gov.tr address.

The complaints received through Water User Associations are generally related to problems encountered during the implementation phase while the complaints conveyed through other units may be related to all works and procedures carried out by DSI. Water User Associations record the complaints received by them to share them with DSI where necessary and upon request.

The grievance mechanism is shown below.

Complaint/demand received from the contractor

Figure 8‑1. Channels and Process of the Grievance Mechanism

DSI will ensure the functionality of the Grievance Mechanism. The Public Relations Specialist, who will be appointed by DSI at the project site, is responsible for recording the complaints filed over phone or in writing. DSI will appoint a Public Relations Specialist (or specialists) to disseminate information about the grievance mechanism.

A database will be created by the Water Users Association for all written and verbal complaints received by the Water Users Association regarding the project. DSI will also inform the management of the Water Users Association about the resolution process of complaints.

The contractor that will carry out the construction works of the project will forward to DSI the complaints and demands notified thereto. In case of any damage to lands, infrastructure or crops by the contractor, DSI undertakes that the contractor will cover the resulting losses. The contract to be signed with the contractor will include provisions as to the effect that the damages caused by the firm will be eliminated.

During the implementation period, objections can be filed to the nearest DSI unit (the Water Users Association, Project Directorate, DSI Section Directorate, Regional Directorate or General Directorate) in person, by phone or by e-mail. All incoming objections will be recorded and the parties filing these objections will be responded in writing. PAPs will be informed about their legal rights regarding the impacts during the construction process as well as the introduced grievance mechanism.

PAPs will be regularly informed by DSI officials about the legal process and rights regarding land acquisition as well as expropriation/land consolidation and construction processes every 6 months.

Any complaint and demand to be filed by PAPs or other stakeholders will be recorded by DSI on a project basis. Incoming complaints will be evaluated and closed while the closed complaints will be documented and stored.

Any complaint received by DSI will be responded within 30 days of receipt. In case the resolution of a complaint lasts more than 30 days, the circumstance will be notified to the relevant complainant and an attempt will be made by more senior authorities to resolve the problem within a month.

Complaints can be received through written petition, e-mail or in person. Besides, it is also possible to file a complaint by filling in the contact form ([http://www.DSI.gov.tr/faaliyetler/d%C3%BCnya-bankas%C4%B1-t%C3%BCrkiye-sulama-modernizasyonu-projesi/i-leti%C5%9Fim](http://www.dsi.gov.tr/faaliyetler/d%C3%BCnya-bankas%C4%B1-t%C3%BCrkiye-sulama-modernizasyonu-projesi/i-leti%C5%9Fim)) available on the official website of the General Directorate of DSI. Complaints received through this channel will be sent to the relevant units by the Financed Projects Section Directorate under the Department of Project and Construction. Two separate complaint forms will be used for the Grievance Mechanism. The first form is the 'Complaint Filing Form'. When a complaint is initially received, a copy of the filled-in complaint form will be submitted to the applicant upon request. After remedial actions are taken and the complaint is remedied, a 'Closure Form' will be filled in by the grievance officer. Sample Complaint Forms are presented in Annex 11.2. The figure below shows the communication channels for the grievance and demand mechanism.mun

18th Regional Directorate of DSI in Isparta

* 0246 224 11 04
* DSI18@DSI.gov.tr

Figure 8‑2. Authorities for Filing Complaints

DSI will inform all individuals and communities affected by the project about the Grievance Mechanism through engagement activities and introduce the project's site staff to whom they may file any complaint regarding the implementation of the project.

## Field Findings on Grievances

During the interviews with the mukhtars, it was asked whether the mukhtars had any complaints about irrigation in the Project impact area. The information obtained is presented in the table below. The survey revealed that 5 mukhtars out of the 15 settlements had previously complained about irrigation, while 9 mukhtars had filed a request. Almost all of the complaints and requests have been reported to the WUA. 9 of 14 complaints / requests reported have been resolved. It seems that unresolved complaints are related to insufficient water / late supply. These problems are expected to disappear with the implementation of the project. Information on how to provide water supply during the construction and operation phases will also be shared in stakeholder briefing meetings with mukhtars and water users.

Table 8‑1. The List of the Mukhtar’s Grievances

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Settlement | Grievance location | Grievance method | Grievance type | Grievance subject | Is the grievance resolved? |
| Aliköy | WUA | Phone | Complaint | Inadequate water | Yes |
| Bayat | WUA | Meeting | Request | Inadequate water | Yes |
| Beydere | WUA | Visit | Complaint and request | Inadequate water, channel cleaning | No |
| Bozanönü | WUA | Phone | Request | No water | No |
| Büyükgökçeli | WUA | Visit | Request | Technical | Yes |
| Büyükhacılar | WUA | Phone | Request | Water allocation | Yes |
| Harmanören | WUA | Phone | Request | Request water | No |
| Kuleönü | WUA | Petition | Complaint and request | Inadequate water | Yes |
| Küçükgökçeli | WUA | Phone | Request | Water shortage | Yes |
| Senirce | WUA | Petition | Complaint | Inadequate water | Yes |
| Sevinçbey | WUA | Phone | Request | Electricity shortage | Yes |
| Yazısöğüt | WUA | Phone | Request | Delays in receiving water | No |
| Cami | DSI | Phone | Request | Water shortage | Yes |
| İslamköy | Subgovernor | Meeting | Complaint | Delays in receiving water | No |

Source: Mukhtar Surveys, 2020

# Monitoring, Evaluation and Reporting

The main objective of implementing a RAP is to mitigate or eliminate negative social impacts on the persons and communities to be affected and to restore livelihoods to the pre-project levels. Aims of the monitoring activities intended for the RAP are as follows:

* To fulfill the actions and commitments under the RAP in a timely and complete manner,
* To ensure that the affected parties fulfilling the criteria of eligibility are fully paid regarding the compensation they are entitled to within the periods agreed upon,
* To follow the objections and complaints filed by PAPs and, if necessary, to take appropriate remedial actions.

Land acquisition processes will be regularly monitored and followed through **semi-annual** monitoring and follow-up activities.

The General Directorate of DSI and the 18th Regional Directorate of DSI in Isparta will be responsible for implementing and monitoring the project's land acquisition activities. A Project Management Team assigned within the Regional Directorate will be in constant contact with the construction contractors, beneficiaries and other stakeholders within the affected communities by monitoring the practices related to the RAP and submit semi-annual reports containing the progress of the RAP to the Regional Coordinator and the Project Management Team within the General Directorate of DSI (to the Relevant Expert) by coordinating the steps taken towards the resolution of complaints.

RAP monitoring activities will be carried out under the supervision of DSI's Project and Construction Department and Real Estate and Expropriation Department and through the active monitoring of the relevant regional directorates. Land acquisition activities carried out by DSI will be monitored, and monitoring activities will be carried out through regular field trips and the reports prepared by the project's field team. If necessary, DSI may choose to hire a consultant for the implementation and monitoring of the RAP.

DSI will inform the World Bank about the progress made in practice and the relevant non-conformities through semi-annual reports by monitoring the land acquisition processes.

As stated above, the World Bank will also follow the processes within the scope of regular supervision and offer solutions to significant problems if necessary.

**Following the completion of the** RAP implementation, DSI will assign an independent consultant to evaluate the implementation of the land acquisition activities conducted thereby, and this consultant will be different from the monitoring and follow-up consultant. This consultant will:

* Examine whether RAP practices are compatible with the RAP,
* Report the steps taken in a timely and solution-oriented manner regarding the problems encountered and by fulfilling the requirements specified in the RAP,
* Examine whether vulnerable communities and unauthorized land users are ignored,
* Examine the feedback and complaints of the society about the loss of land and land-based livelihoods,
* Evaluate the current consultation strategy and its impacts on local communities and PAPs,
* Evaluate the suitability of the measures taken by DSI regarding land acquisition and the applicable compensation strategy to make sure that the project will not have any negative impact on the lands.

The independent consultant will prepare the RAP Closing Report and submit it to the World Bank for approval. These final Closing Reports will be published on the website of DSI in English and Turkish.

DSI also plans to carry out a comprehensive independent study other than those required by the Bank in order to assess the impacts of land acquisition and irrigation modernization activities on farmers and local people. This study will be carried out in the 5th or 6th year of the project to make sure that the modernized irrigation projects are in operation for at least 1 year.

Some performance criteria suggested for the monitoring of land acquisition implementation processes are given in the table below.

Table 9‑1. Monitoring-Evaluation Indicators

| Indicator | Source of Information | Responsible Party | Frequency of Reporting |
| --- | --- | --- | --- |
| *Land Acquisition* |  |  |  |
| * Total number of parcels subject to acquisition (ownership, permanent and temporary easement, rental) (On the basis of the affected settlements) * Public Lands * Privately-Owned Lands * Residential Lands (Zoned land, etc.) * Disputed parcels under lawsuit * Lands of Third-Party Institutions * Lands Not Subject to Registration * Willing buyer - willing seller arrangement as per Article 8 * Under Article 10 (Ongoing/closed) * Lands acquired as a result of the expropriation request for the remaining lands | Expropriation records | Department of Real Estate and Expropriation  18th Regional Directorate of DSI | Once a month |
| Immovable properties affected by land acquisition (buildings, appurtenant structures, trees)   * List of immovable properties * Number of parcels housing an immovable property (by type - privately-owned, treasury, etc.) | Expropriation records | Department of Real Estate and Expropriation  18th Regional Directorate of DSI | Once a month |
| Total number of affected and compensated persons (By affected settlement)   * Parcel owners * Land owners * Land users (who are entitled to possession and/or are identified as users) * Male/Female * Vulnerable communities | Expropriation records and compensation payment records  Contractor rental contract | 18th Regional Directorate of DSI | Once a month |
| Land entries - exits   * Number of reclaimed parcels * Number of parcels handed over in a disrupted way * Land owners * Land users (who are entitled to possession and/or are identified as users) * Male/Female * Vulnerable communities | Land Entry and Exit Protocols  Grievance Mechanism | 18th Regional Directorate of DSI | Every 3 months |
| *2. Compensations and Payments* |  |  |  |
| Completed compensation payments (By affected settlement - By ownership, permanent and temporary easement)   * Parcel owners * Land owners * Land users (who are entitled to possession and/or are identified as users) * Vulnerable communities * Compensation in a way to cover the replacement cost * Payments made under Article 8 * Payments made under Article 10 * Payments made under Article 19 * Determination of permanent and temporary easement price * Calculation of the Loss of Value Arising From Permanent Easement * Compensation paid as a result of expropriation of the remaining land * Disputed parcels under lawsuit | Compensation payment records  Comparison of the result with market research and completed payments  Settlement Minutes as per Article 8 | Department of Real Estate and Expropriation  18th Regional Directorate of DSI | Once a month |
| Crop price payments   * Landowners * Land users (who are entitled to possession and/or are identified as users) * Vulnerable communities | Payment records | Department of Real Estate and Expropriation  18th Regional Directorate of DSI | Once a month |
| *3. Livelihood* |  |  |  |
| Use of compensation   * How do the PAPs use their entitled compensations? * Landowners * Land users (who are entitled to possession and/or are identified as users) * Vulnerable communities | Survey and Internal Monitoring and Evaluation reports | 18th Regional Directorate of DSI | Every 6 months |
| Use of compensation   * How do the PAPs use their entitled compensations? * Landowners * Land users (who are entitled to possession and/or are identified as users) * Vulnerable communities | Survey and Internal Monitoring and Evaluation reports | 18th Regional Directorate of DSI | Every 6 months |
| Income changes of the PAPs   * Sources of income * Income/expense amount | Survey and Internal Monitoring and Evaluation reports | 18th Regional Directorate of DSI | Every 6 months |
| Crop pattern of the PAPs   * Number of households engaged in agriculture * Number of female farmers (those who are/are not the members of the WUA, owners/users) * Species of cultivated crops * Cultivated areas (by crop) * Quantity and sources of water supply | Data of the District Directorate of Agriculture and Forestry  Data of the Water Users Association  Interviews with the PAPs | 18th Regional Directorate of DSI | Every 6 months |
| Livestock production activities of the PAPs   * Number of bovine and ovine animals * Number of households engaged in livestock production * Area of cultivated forage crops (by crop) | Data of the District Directorate of Agriculture and Forestry  Data of the Water Users Association  Interviews with the PAPs | 18th Regional Directorate of DSI | Every 6 months |
| Local employment   * Number of the PAPs employed locally (by settlement) * Breakdown of employment by type and gender | Contractor  Interviews with the PAPs | 18th Regional Directorate of DSI | Every 6 months |
| Cooperation with institutions   * Number of agricultural extension and training activities offered by third-party institutions * Number of the PAPs attending the agricultural extension and training activities offered by third-party institutions (by gender) * Number of the attending PAPs awarded with certificates/documents of attendance during the agricultural extension and training activities offered by third-party institutions (by gender) * Number of cooperating institutions * Number of the PAPs benefiting from the grant schemes and/or supports of institutions (breakdown by types of support and gender) | Data records of cooperating institutions  Interviews with the PAPs | 18th Regional Directorate of DSI | Every 3 months |
| Access to fields, grazing areas and valves   * Number of the PAPs reporting that they could not access their fields * Number of the PAPs reporting that their animals could not access their grazing areas * Number of access points placed for grazing areas and fields * Number of valves and hydrant places installed along the route | Interviews with the PAPs  Grievance records  Contractor | 18th Regional Directorate of DSI | Every 3 months |
| Making open canalette areas available for agriculture   * Number and dimensions of the canalettes removed * Size of the area made available for agriculture, the number of users and cultivation information | Interviews with the PAPs  Grievance records  Contractor  Water Users Association | 18th Regional Directorate of DSI | Every 3 months |
| *4. Stakeholder Engagement and Grievance Mechanism* |  |  |  |
| Consultations (by affected settlement)   * Number of organized meetings * Number of the PAPs informed (by gender) * Number and breakdown of the stakeholders informed (Municipality, mukhtar, public institution, NGO, etc.), the number of meetings * Designs of published and distributed banners, posters, brochures * Number of cooperating institutions and the types of cooperation * Number of the meetings organized by third-party institutions (IWC, the District Directorate of Agriculture, etc.) and the number of participants * Number of gender-sensitive trainings events organized for the personnel of DSI and the Water Users Association and the number of participants * Number of meetings organized only for women and the number of participants | Records of 18th Regional Directorate of DSI  Data records of cooperating institutions  Interviews with the PAPs  Data of the Water Users Association | 18th Regional Directorate of DSI | Once a month |
| Number of the complaints filed regarding land acquisition (by affected settlement)   * Breakdown by the channels of submission * Open * Closed * Complainant Woman/Man * Subject * Average period of closing * Closed on time | Records of 18th Regional Directorate of DSI | 18th Regional Directorate of DSI | Once a month |
| Losses covered by the contractor   * Open * Closed * Complainant Woman/Man * Subject * Average period of closing * Closed on time * Actual budget | Records of 18th Regional Directorate of DSI  Records of the contractor | 18th Regional Directorate of DSI | Once a month |
| *Budget, Management Structure and Reporting* |  |  |  |
| * Actual budget (TRY and USD) * Appointed public relations and environment specialist * Created Project Management Unit * Prepared reports (ESMP, RAP, etc.) | Data of DSI's Department of Construction and Project  Data of DSI's Department of Real Estate and Expropriation  Records of 18th Regional Directorate of DSI | DSI's Department of Construction and Project | Once a month |

Subjects covered by the monitoring reports are listed below.

* Information about the area of influence and the owners and users within the area of influence (the breakdown of public and privately-owned lands, overall data on rights holders, overall data on land users and data on vulnerable groups, if any),
* The impacted parcels and lands within the impact area, the number of expropriated zoned land parcels, the number of owners, the expropriation cost, the zoning modifications made to prevent the impact, the project route changes,
* The ratio of the amount of affected land to the remaining land, the crop pattern on the affected and remaining lands
* The method and stage of expropriation (Willing buyer - willing seller arrangements, the date of public interest decision, if any, how to inform and consult regarding the parcels acquired through willing buyer - willing seller arrangements and litigation, etc.),
* Status of the expropriated lands (parcels whose legal proceedings are going on, registered parcels, disposed parcels, parcels whose project construction works are completed and handed over for use, etc.),
* Status of the lands rented for a temporary period of time,
* Restoration of lands, land entry and exits,
* Information activities on land restrictions,
* Analysis of the grievance and demand mechanism concerning land acquisition; information on recorded complaints (the number of complaints, the subjects of complaint, the number of female and male complainants, the ratio of resolved and pending complaints, the period of resolving complaints, etc.),
* Information and analysis on the functioning and final status of land acquisition management
* Monitoring the expected realizations in the estimated budget for land acquisition,
* Vulnerable groups will be among the issues to be monitored and evaluated.
* Summary of consultations with the project-impacted and other stakeholders, if any, according to the RAP for the relevant period (including consultations with women and vulnerable groups).

# Budget and Business Plan

## Budget

An estimated budget has been prepared in PAPF for the implementation of RAP. Accordingly, the estimated total budget for land acquisition is around 70 million TL. The final budget information will be updated depending on the progress.

In addition, the supports from third parties other than DSI (IWC, SYDV, the Provincial-District Directorates of Agriculture, Isparta Plain Project, Isparta Metropolitan Municipality, etc.) and the cash realizations by the contractor within the scope of land acquisition (rental, etc.) and the grievance mechanism will also be among the budget items.

However, land acquisition is an ongoing process and has not been completed, yet. While updating the RAP, this budget will also be updated and DSI will also provide information on the realizations of budget items under the reporting to the World Bank.

Expropriation compensations for the expropriation process will be determined according to the current parcel based valuation. In this context, the Land Market Research Report prepared by HAPA (August 2020), which illustrates the land value price ranges, is presented in Annex 11-3. The data obtained from this report will be based on the determination of expropriation costs and will be used in the calculation of full replacement compensations in accordance with the World Bank OP 4.12 policy.

Table 10‑1. RAP Budget

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item No | Subject | Unit | Type of PIP | Responsible Party | Number of Parcels | Number of PAPs | Total Actual Budget (TRY) | Total Actual Budget (USD) |
| A. Price of Acquiring Lands and Immovable Properties | | | | **DSI - Contractor** |  |  |  |  |
| 1 | **Acquisition of Lands and Immovable Properties by Expropriation** |  |  | **DSI** |  |  |  |  |
| Acquisition of privately-owned parcels | Parcel/TRY | Shareholder |  |  |  |  |
| Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures) | Appurtenant Structure/TRY | Shareholder |  |  |  |  |
| Acquisition of trees over privately-owned parcels | Number | Shareholder |  |  |  |  |
| Acquisition of lands owned by third-party institutions apart from privately-owned parcels | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels | Number | Identified PAP user |  |  |  |  |
| Acquisition of Treasury and Common Public Property Lands | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over treasury and common public property lands | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over treasury and common public property lands | Number | Identified PAP user |  |  |  |  |
| 2 | **Acquisition of Lands and Immovable Properties by Permanent Easement** |  |  | **DSI** |  |  |  |  |
| Acquisition of privately-owned parcels | Parcel/TRY | Shareholder |  |  |  |  |
| Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures) | Appurtenant Structure/TRY | Shareholder |  |  |  |  |
| Acquisition of trees over privately-owned parcels | Number | Shareholder |  |  |  |  |
| Acquisition of lands owned by third-party institutions apart from privately-owned parcels | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels | Number | Identified PAP user |  |  |  |  |
| Acquisition of Treasury and Common Public Property Lands | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over treasury and common public property lands | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over treasury and common public property lands | Number | Identified PAP user |  |  |  |  |
| 3 | **Acquisition of Lands and Immovable Properties by Temporary Easement** | | | **DSI** |  |  |  |  |
| Acquisition of immovable properties over privately-owned parcels (Buildings and appurtenant structures) | Appurtenant Structure/TRY | Shareholder |  |  |  |  |
| Acquisition of trees over privately-owned parcels | Number | Shareholder |  |  |  |  |
| Acquisition of lands owned by third-party institutions apart from privately-owned parcels | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over the lands owned by third-party institutions apart from privately-owned parcels | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over the lands owned by third-party institutions apart from privately-owned parcels | Number | Identified PAP user |  |  |  |  |
| Acquisition of Treasury and Common Public Property Lands | Parcel/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of immovable properties over treasury and common public property lands | Appurtenant Structure/TRY | Third-party institution PAP holding a right of possession |  |  |  |  |
| Acquisition of trees over treasury and common public property lands | Number | Identified PAP user |  |  |  |  |
| 4 | **Land Acquisition by Rental** | | | **Contractor - DSI** |  |  |  |  |
| Acquisition of privately-owned parcels | Parcel/TRY | Shareholder |  |  |  |  |
| Acquisition of lands other than privately-owned parcels | Parcel/TRY | PAP holding a right of possession, Third-Party Institutions |  |  |  |  |
| 5 | **Acquisition of remaining lands agreed for expropriation** | Parcel/TRY | Shareholder | **DSI** |  |  |  |  |
| B. Crop Price | | | | **DSI** |  |  |  |  |
| 1 | Crop price for privately-owned parcels | Crop species/TRY | Identified PAP user, tenant | **DSI** |  |  |  |  |
| 2 | Crop price for lands other than privately-owned parcels | Crop species/TRY | Identified PAP user, tenant |  |  |  |  |
| C. Transaction Costs for the Acquisition of Lands and Immovable Properties | | | | **DSI** |  |  |  |  |
| 1 | Expropriation (ownership, permanent and temporary easement) prices determined during the negotiations to be conducted as per Article 8 of the Expropriation Law are determined in a way to cover the transaction costs for acquiring immovable properties. | Parcel/TRY | Shareholders, PAPs holding a right of possession | **DSI** |  |  |  |  |
| 2 | Transaction costs (land registry, etc.) of the PAPs with whom agreement is reached as per Article 8 of the Expropriation Law are covered by the calculated expropriation price. | Parcel/TRY | Shareholders, PAPs holding a right of possession |  |  |  |  |
| D. Compensation of Losses through the Grievance Mechanism | | | | **Contractor -  DSI** |  |  |  |  |
| 1 | Crop losses covered by the contractor |  | PAP filing a complaint | **Contractor -  DSI** |  |  |  |  |
| 2 | Damage to appurtenant structures and infrastructure, etc. as covered by the contractor |  | PAP filing a complaint |  |  |  |  |
| E. Supports Offered by Third-Party Institutions | | | | **Third-Party Institution - Contractor -  DSI** |  |  |  |  |
| 1 | Activities such as information, training, agricultural extension, etc. | Person/TRY | Benefiting PAP | **Third-Party Institution - Contractor -  DSI** |  |  |  |  |
| 2 | Local employment | Person/TRY | Benefiting PAP |  |  |  |  |
| 3 | Demonstration activities, grant schemes, offered cash supports, etc. | Person/TRY | Benefiting PAP |  |  |  |  |
| F. Consultancy Services for Preparing the RAP and Expropriation Plans, Updating, Monitoring and Evaluating the RAP | | | | **Consultant -  DSI** |  |  |  |  |
| 1 | Consultation services for the preparation of expropriation plans | Person/TRY | Benefiting PAP | **Consultant -  DSI** |  |  |  |  |
| 2 | Consultation services for the preparation of the RAP | Person/TRY | Benefiting PAP |  |  |  |  |
| 3 | Preparation of RAP monitoring and evaluation reports | Person/TRY | Benefiting PAP |  |  |  |  |
| G. Total Budget | | | | **DSI** |  |  |  |  |
| 1 | Budget items A + B + C + D + E + F | TRY | Total Types of PAP | **DSI** |  |  |  |  |

## Business Plan

* The division of labor planned under the RAP is shown below.
* The total duration for the preparation, implementation and monitoring of the RAP is 24 months.
* Preparation of the RAP for the first section will start in the second quarter of 2020 and come to an end in the third quarter of 2020.
* Implementation of the RAP will start in the first quarter of 2021 and come to an end of 2026.

The construction period of the project is 5 years and it will start in 2021 and it is aimed to be completed by the end of 2026.

Table 10‑2. RAP Business Plan

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | | Responsible Party |  |
| Preparation of the RAP | | |  |
|  | Appointment of a RAP Consultant (if deemed necessary) | DSI's Department of Real Estate and Expropriation | February 2020 |
|  | Reaching an agreement over the social baseline study | DSI's Department of Real Estate and Expropriation and/or the RAP Consultant | March 2020 |
|  | Valuation of assets subject to land acquisition | DSI Regional Directorate | 2020-2026 |
|  | Preparation of the draft RAP and submission thereof to DSI and the World Bank for evaluation | DSI's Department of Project and Construction  DSI's Department of Real Estate and Expropriation and/or the RAP Consultant | September 2020 |
|  | Disclosure of the draft RAP | DSI's Department of Real Estate and Expropriation | October 2020 |
|  | Finalization of the RAP (in the evidence of feedbacks) | DSI's Department of Real Estate and Expropriation or the RAP Consultant | November 2020 |
|  | Adaptation of the Grievance Mechanism to the Irrigation Modernization Project | General Directorate of DSI | February 2020 |
| Implementation of the RAP | | |  |
|  | Preparation of expropriation plans for the parcels not expropriated during the first section | DSI's Department of Real Estate and Expropriation and the RAP Consultant | 2020-2021 |
|  | Identification of users and vulnerable groups regarding the lands | DSI Regional Directorate | 2020-2026 |
|  | Consultations on project requirements with affected parties and other stakeholders | DSI Regional Directorate | 2020-2026 |
|  | Compensation negotiations | DSI Regional Directorate | 2021-2026 |
|  | Payment of compensations and land entry | DSI Regional Directorate | 2021-2026 |
|  | Continuous consultations on the construction plan and the implementation of the RAP | DSI Regional Directorate | 2021-2026 |
|  | Construction according to the new irrigation plan | Construction Contractor | 2021-2026 |
|  | Continuous monitoring and (semi-annual) reporting of Land Acquisition Plan practices | DSI Regional Directorate, DSI's Department of Real Estate and Expropriation and the RAP Consultant | 2020-2026 |
|  | Updating the RAP (if deemed necessary) | DSI's Department of Real Estate and Expropriation and/or the RAP Consultant | 2020-2021 |
|  | Disclosure of Updated RAP (if deemed necessary) | DSI's Department of Real Estate and Expropriation and/or the RAP Consultant | 2020-2021 |
|  | Water supply during the construction process | DSI Regional Directorate and the Water Users Association | 2021-2026 |
|  | Determining the institutions to cooperate and offering and monitoring various supports (agricultural extension, training, grant, etc.) | DSI Regional Directorate and Third-Party Institutions | 2020-2026 |
|  | Resolution of complaints about land acquisition | DSI Regional Directorate and the Contractor | 2020-2026 |
| Post-RAP Implementation | | |  |
|  | Preparation of the draft RAP Closing Report | DSI's Department of Real Estate and Expropriation or the Independent Consultant | 2027 |
|  | Submission of the draft RAP Closing Report to DSI and the World Bank | DSI's Department of Real Estate and Expropriation or the Independent Consultant | 2027 |
|  | Finalization of the RAP Closing Report | DSI's Department of Real Estate and Expropriation or the Independent Monitoring & Follow-Up Consultant | 2027 |
|  | Disclosure of the RAP Closing Report | General Directorate of DSI | 2027 |
|  | Organization of the RAP Closing Meeting | DSI Regional Directorate, DSI's Department of Real Estate and Expropriation and the RAP Consultant | 2027 |

# Annexes

## Methodology to be Used by DSI for Identifying Vulnerable Groups

Vulnerable group identification was conducted by SRM for 5 affected settlements according to fieldwork and expropriation draft plans. However, vulnerable groups may change due to changes in expropriation plans that may occur due to route changes, etc. Therefore, after the expropriation plans are finalized and the expropriation costs are paid, the vulnerable groups will be identified in all settlements by DSI officials.

First of all, after the affected parcels and owners are determined according to the expropriation plans, owners and users of the parcels affected by the expropriation of 20% or more of the parcel will be determined by DSI officials. The remaining land assets will be learned from the interviews with the identified owners and users, and the land acquisition impact will be determined accordingly.

During mukhtar interviews, PAPs whose land is impacted by the Project’s land acquisiton, belonging to vulnerable groups will be identified. Vulnerable groups include PAPs aged 65 and over, female household heads and physically disabled people who permanently reside in the settlement.

**A. Interviews with Vulnerable Groups Reported by Mukhtars at Settlement Level**

**PERSONS DEFINED AS VULNERABLE GROUPS**

1. Name and surname of the interviewer
2. Name and Surname
3. Settlement, Date of Interview
4. Is the parcel used/owned thereby affected by expropriation?

a. Yes b. No

1. Does s/he get support from SYDV? If yes, which supports?
2. If yes, vulnerable group category (More than one options can be chosen)

a. Female household head

b. Household head over 65

c. Physically disabled

d. Person in need

e. Person whose lands (owned/used) are affected by 20% and more

**B. Form for the Identification of the Level of Impact for the User and/or Owner Whose Parcel is Affected by Ownership Expropriation (Permanent Land Acquisition) by 20% and More**

To be filled in by DSI Officials. **To be filled in for the persons whose parcel is affected by 20%**.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Settlement | Affected Parcel's No | Parcel Size (M2) | Affected Crop | Species and number of the affected trees | Affected immovable properties (Coop, fence, etc.) | Type of Impact | Type of Parcel | Name and Surname of the User | Gender | Age | Phone | Status of the Owner | Area of registered lands owned (M2) | Area of lands used (M2) | Total area of lands (M2) | Proportion of the size of affected parcels to the total size of lands (%) |
|  |  |  |  |  |  | Expropriation | Privately-Owned |  |  |  |  | Owner |  |  |  |  |
|  |  |  |  |  |  | Permanent easement | Treasury | Shareholder |  |  |  |  |
|  |  |  |  |  |  | Temporary easement | Common Public Property | Official tenant |  |  |  |  |
|  |  |  |  |  |  | Expropriation + permanent easement | Not subject to registration | User (Without any rental contract) |  |  |  |  |
|  |  |  |  |  |  | Expropriation + permanent + temporary easement | Forestry | Occupant (User of an unregistered land other than privately-owned parcels) |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | X Parcels | X M2 |  |  |  |  |  |  | X M2 | X M2 | XM2 | Vulnerable group if 20% and higher |

## Grievance Application Form / Closing Form

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **GRIEVANCE APPLICATION FORM** | | | | | |
| Name of the Complainant: | |  | | Date: | |
| Title: | |  | |
| **THE OWNER OF THE COMPLAINT** | | | **HOW TO RECEIVE THE COMPLAINT** | | |
| Name/Surname  (This area is not a requisite. Anonymous grievances will also be recorded.\*) |  | | Telephone | | □ |
| Telephone |  | | Information meeting | | □ |
| Address |  | | Application to field office | | □ |
| Settlement |  | | Post/E-post | | □ |
| Signature  (If ) |  | | Filed visit | | □ |
| Other:  ……………………………….. | | □ |
| **COMPLAINT DETAILS** | | | | |  |
| \*IMPORTANT NOTE  Especially for complaints received anonymously, the complainant will be asked through which channel to be informed and the desired information channel (phone, e-mail etc.) will be specified. | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **GRIEVANCE CLOSURE FORM** | | | | | |
| **EVALUATION OF THE COMPLAINT** | | Expropriation | | | □ |
| Damage to homes or livelihoods | | | □ |
| Environmental or social | | | □ |
| Labor sourced | | | □ |
| Other | | | □ |
|  | | | | | |
| **Does It Require Compensation?** | **□ YES** | | | **□ NO** | |
| **SONUÇ** | | | | | |
|  | | | | | |
| **CLOSURE**  *This section will be filled in and signed by the complainant and The Complaint Evaluation Committee after the compensation has been received and the complaint has been remedied. (Instead of the complainant's signature, bank receipt or other documents indicating that the compensation has been made can be attached)* | | | | | |
| **Kurum adına yetkili** | | | **Şikayetçi** | | |
| Name/Surname  Date/Signature | | | Name/Surname  Date/Signature (If Possible) | | |

## Market Land Prices of the Settlements

Table 11‑1. Market Land Prices of the Settlements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Province | District | Settlement | Garden  (TL/m²) | Irrigated land  (TL/m²) |
| 1 | Isparta | Atabey | Bayat | 25-35 | 20-25 |
| 2 | Isparta | Atabey | Harmanören | 25-30 | 20-25 |
| 3 | Isparta | Atabey | İslamköy | 25-35 | 20-30 |
| 4 | Isparta | Atabey | Onaç | 25-35 | 20-30 |
| 5 | Isparta | Eğirdir | Beydere | 25-35 | - |
| 6 | Isparta | Eğirdir | Sevinçbey | 30-50 | 15-251 |
| 7 | Isparta | Gönen | Gönen-Cami Mahallesi | 25-30 | 10-251 |
| 8 | Isparta | Gönen | Senirce | 25-30 | 20-25 |
| 9 | Isparta | Central | Aliköy | 100-120 | 50-1002 |
| 10 | Isparta | Central | Bozanönü | 50-80 | 20-503 |
| 11 | Isparta | Central | Büyükgökçeli | 40-50 | 20-40 |
| 12 | Isparta | Central | Büyükhacılar | 60-70 | 30-603 |
| 13 | Isparta | Central | Kuleönü | 50-120 | 20-504 |
| 14 | Isparta | Central | Küçükgökçeli | 35-45 | 20-40 |
| 15 | Isparta | Central | Küçükhacılar | 70-100 | 50-803 |
| 16 | Isparta | Central | Yazısöğüt | 80-120 | 80-1205 |

## Photos of the Field Study

|  |  |
| --- | --- |
| Meeting with Eğirdir Mayor | Meeting with Atabey Mayor |
| Meeting with Gönen Mayor | Meeting with Atabey Subgovernor and Director District Agriculture |
| Meeting with Gönen Subgovernor | Meeting with Gönen Director District Agriculture |
| Meeting with DSI 18. Bölge Emlak ve Kamulaştırma Şube Müdürü ile görüşme | DSI District Directorate |
| Meeting with the President of the Water Users Association of Atabey | Meeting with the Agricultural Services Manager of Isparta Special Provincial Administration |
| Meeting with the Deputy Director of Eğirdir District Directorate of Agriculture | Meeting with the Chairman and General Secretary of Eğirdir Chamber of Agriculture |
| Meeting with the Chairman of Atabey SYDV | Meeting with the Chairman of Isparta SYDV |
| Meeting with the Chairman of Gönen Chamber of Agriculture | Meeting with the Chairmans of Isparta and Atabey Chambers of Agriculture |
| Aliköy and Küçükhacılar Neighborhoods Mukhtar Surveys | Bayat Neighborhood Mukhtar Survey |
| Beydere Neighborhood Mukhtar and Household Surveys | Büyükgökçeli Neighborhood Mukhtar and Household Surveys |
| Büyükhacılar and Yazısöğüt Neighborhoods Household Surveys | Gönen and Senirce Neighborhoods Household Surveys |
| Harmanören Neighborhood Mukhtar and Household Surveys | İslamköy Neighborhood Mukhtar Survey |
| Kuleönü Neighborhood Mukhtar Survey | Onaç Neighborhood Mukhtar Survey |
| Sevinçbey Neighborhood Mukhtar and Household Surveys | Sevinçbey Neighborhood Mukhtar and Household Surveys |

1. This scope is based on RFP for Atabey Irrigation Modernization Project [↑](#footnote-ref-1)
2. Note: The area shown in red is not the project area boundaries, but only shows the affected settlements. [↑](#footnote-ref-2)
3. Parcels with construction and building permits [↑](#footnote-ref-3)
4. Address-Based Population Registration System, 2019. <http://tuik.gov.tr/PreTablo.do?alt_id=1059>

   \*Merkez District refers to Central District. [↑](#footnote-ref-4)
5. Bayat (Atabey), Büyükgökçeli (Central), Cami (Gönen), Harmanören (Atabey), İslamköy (Atabey), Küçükhacılar (Central), Senirce (Gönen) [↑](#footnote-ref-5)
6. <https://www.baka.gov.tr/assets/upload/dosyalar/15247497272018YiLiiSPARTAiLYATiRiMDESTEKVETANiTiMSTRATEJiSi-02.01.18.pdf> [↑](#footnote-ref-6)
7. <http://www.itso.org/uploads/attachments/2f167b0df786b206895b558c61844e90.pdf> [↑](#footnote-ref-7)
8. According to the data from the OIZs in 2017, [↑](#footnote-ref-8)
9. According to the number of households, not the amount of income generated. [↑](#footnote-ref-9)
10. For the full text of the policy document and its implementation guidelines, see https://policies.worldbank.org/sites/ppf3/PPFDocuments/090224b0822f89db.pdf [↑](#footnote-ref-10)
11. Article 19 of the Expropriation Law provides that the costs of trees and materials used for the buildings or other structures of those that have established/set up over the lands of others by way of spending money will be compensated at full price. Costs of the materials used for buildings/structures must be at an equivalent cost to purchase a similar structure in accordance with the Bank's social measure policies. [↑](#footnote-ref-11)
12. If it is determined that an immovable property not registered in the title deed registry, and decided to be expropriated as per Article 19 of the Expropriation Law is not one of the public properties listed in Article of the Cadastre Law No. 3402, a possessor is present for the immovable property and a claim of possession is filed, then an on-site examination is conducted through the experts chosen as per Article 9 for the collection of evidence and a minute is drafted. All documents which are prepared and collected by the administration as per Article 10 shall be submitted to the civil court of first instance and the court shall be asked to determine the expropriation price of the immovable property and to decide on the registry thereof in the name of the administration in return for the payment of this price. The court sets the expropriation value of the immovable property in line with the procedure and time period stipulated in Article 10. [↑](#footnote-ref-12)